



МИНИСТЕРСТВО НАУКИ И ВЫСШЕГО ОБРАЗОВАНИЯ РОССИЙСКОЙ ФЕДЕРАЦИИ
Федеральное государственное автономное образовательное учреждение высшего образования
«Дальневосточный федеральный университет»
(ДФУ)
Школа биомедицины



СБОРНИК ПРОГРАММ ПРАКТИК

НАПРАВЛЕНИЕ ПОДГОТОВКИ

19.04.01 Биотехнология

Программа академической магистратуры

Agri-Food Biotechnology

Квалификация выпускника – магистр

Форма обучения: *очная*

Нормативный срок освоения программы

(очная форма обучения) *2 года*

Владивосток
2019



МИНИСТЕРСТВО НАУКИ И ВЫСШЕГО ОБРАЗОВАНИЯ РОССИЙСКОЙ ФЕДЕРАЦИИ
Федеральное государственное автономное образовательное учреждение высшего образования
«Дальневосточный федеральный университет»
(ДФУ)
ШКОЛА БИОМЕДИЦИНЫ

«СОГЛАСОВАНО»

Руководитель ОП

 Каленик Т.К.

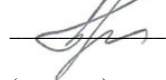
(подпись) (Ф.И.О. рук. ОП)

«12» июля 2018 г.

«УТВЕРЖДАЮ»

Директор Департамента

пищевых наук и технологий

 Ю.В. Приходько

(подпись) (Ф.И.О.)

«12» июля 2018 г.

**РАБОЧАЯ ПРОГРАММА ПРОИЗВОДСТВЕННОЙ
ПРАКТИКИ**

**PRACTICE IN OBTAINING PRIMARY PROFESSIONAL SKILLS / ПРАКТИКА
ПО ПОЛУЧЕНИЮ ПЕРВИЧНЫХ ПРОФЕССИОНАЛЬНЫХ УМЕНИЙ И
НАВЫКОВ**

Направление подготовки 19.04.01 Биотехнология

Профиль подготовки Agri-Food Biotechnology

Квалификация (степень) выпускника

магистр

г. Владивосток
2018

1. REGULATORY DOCUMENTATION REGULATING THE PROCESS OF ORGANIZING AND PASSING PRACTICES

The practice program for obtaining primary professional skills (hereinafter referred to as the training) was developed in accordance with the requirements of the educational standard independently established by the FEFU, approved by the decision of the FEFU Academic Council, protocol No. 06-15 of 06/04/2015, and put into effect by order of the FEFU rector of 07.07 .2015 No. 12-13-1282.

2. OBJECTIVES OF DEVELOPMENT OF EDUCATIONAL PRACTICE

The goals of educational practice in obtaining primary professional skills are to consolidate the theoretical knowledge gained in the study of basic disciplines; acquisition of professional skills in future professional activities; formation of ideas about the work of food enterprises.

3. TASKS OF EDUCATIONAL PRACTICE

The objectives of educational practice in obtaining primary professional skills are:

- collection of material using information and communication technologies and taking into account the basic requirements of information security for solving standard tasks of professional activity;
- Acquaintance with the basic technological equipment, technological processes and safety requirements;
- Familiarization with regulatory and technical documentation, regulations, veterinary norms and rules in the production process.

4. PLACE OF TRAINING IN THE STRUCTURE OF OP

Block B2.V.01 (U) “Training Practice” of the educational standard independently established by the FEFU, direction 19.04.01 “Biotechnology”, approved by the decision of the FEFU Academic Council, protocol No. 06-15 of 06/04/2015, and entered into force by order Rector of FEFU from 07.07.2015 No. 12-13-1282, is mandatory, variable and represents a type of training sessions that are directly focused on professional and practical training of students.

Academic practice is the first stage of practical training at the level of higher education Master's degree and is aimed at students obtaining primary professional skills, including primary abilities and skills of research activities

Training practice is carried out both in third-party organizations that have the necessary human and scientific and technical potential (visiting), and on the basis of the Far Eastern Federal University (stationary).

The educational practice is based on the theoretical development of such disciplines as: Fundamentals of technology products of therapeutic and preventive nutrition / The principles of the technology of therapeutic and prophylactic nutrition, The concept of scientific research in biotechnology / The concept of scientific research in biotechnology, etc.

Student practice is an integral part of the educational process and is necessary for the subsequent study of the disciplines of the professional cycle (Production activities of agro-industrial complexes / Biotechnology of plants and animals / Biotechnology of plants and animals, Genetic modification of bacteria, plants and animals / Genetic modification of bacteria, plants and animals, etc.).

5. TYPES, METHODS, PLACE AND TIME OF TRAINING

Type of practice: The practice of obtaining primary professional skills.

Way of carrying out - stationary / exit (at the choice of the student).

Practice: continuous (2 weeks in 1 course).

Practice time: 1 semester

Place of practice:

The place of practice is the structural units of FEFU (Department of Food Sciences and Technology), as well as organizations whose activities correspond to professional competencies mastered in the framework of the educational program 19.04.01 Biotechnology.

Practice in third-party organizations is based on contracts in accordance with which students are given places of practice, as well as organizational and informational and methodological assistance is provided in the process of internship.

Students can independently offer places for practical training. The student begins the practice only after the official confirmation of the consent of the organization (enterprise) with the conclusion of the contract according to the general model established by the Federal State Autonomous Educational Institution of Higher Education "Far Eastern Federal University".

The internship is possible on the basis of educational institutions, enterprises of all forms of ownership, offered by the undergraduate in the order of his personal initiative, in agreement with the graduating department (Department).

6. TRAINING COMPETENCIES FORMED AS A RESULTS OF TRAINING

Code and wording of competency	Competency Stages	
OK-13 readiness to use legal and ethical standards in assessing the consequences of their professional activities, in the development and implementation of socially significant projects	Knows	legal and ethical standards in assessing the consequences of their professional activities, in the development and implementation of socially significant projects
	Able to	willingness to use legal and ethical standards in assessing the consequences of their professional activities
	knows	skills of using legal and ethical standards in assessing the consequences of their professional activities, in the development and implementation of socially significant projects
PK-12 ability to plan and carry out activities to ensure industrial safety, environmental monitoring and protection	Knows	basics of industrial safety, regulatory and technical documentation, regulations, veterinary norms and rules
	Able to	put knowledge into practice in the field of industrial safety, monitoring and environmental protection
	knows	ways to ensure industrial safety, monitoring and environmental protection
PK-1 readiness for planning, organizing and conducting research in the field of biotechnology, the ability to correctly process the results of experiments and make	Knows	main areas of research in the field of agriculture and biotechnology
	Able to	to receive results and draw sound conclusions from scientific research in the field of agriculture and biotechnology

informed conclusions and conclusions	knows	basic knowledge of research methods in the field of agriculture and biotechnology
PK-15 willingness to ensure the stability of production indicators and the quality of products	Knows	standards for production quality indicators
	Able to	ensure the stability of production indicators and the quality of products
	knows	the ability to ensure the stability of production indicators and the quality of products

7. STRUCTURE AND CONTENT OF EDUCATIONAL PRACTICE

The total complexity of educational practice is 3 credits, 108 hours

№ п/ п	Sections (stages) of practice	Types of work in practice, including independent work of students and laboriousness (in hours)			Current Control Forms	
1	Preparatory stage: - Obtaining documents for practice (direction, diary, assignment); - Arrival at the place of practice and an introductory briefing; - Organization of the workplace and acquaintance with the team.	Obtaining documents for practice (2 hours)	Introductory lecture (2 hours)	Safety briefing (2 h)	Making entries in the diary. Oral conversations.	
2	The main stage: - Study of the organizational structure of the base of practice; - the study of regulatory and technical documentation; - Implementation of individual production tasks; - The study of practical activities.	Accomplishment of practice tasks in accordance with the program (42h)	Safety briefing at the enterprise (2 hours)	Study of materials and documents at the place of practical training (20hours)	Processing and analysis of the obtained practice materials (22 hours)	Making entries in the diary. Oral conversations.

				rs))	
3	<p>The final stage:</p> <ul style="list-style-type: none"> - Processing and systematization of the received material; - Preparation of a report on the passage of organizational and managerial practice; - Protection of the report on organizational and management practices. 	Report writing (8h)	Presentation preparation (6h)	Report Protection (2 hours)	(2	Score with grade

8. TRAINING AND METHODOLOGICAL SUPPORT OF INDEPENDENT WORK OF STUDENTS IN EDUCATIONAL PRACTICE

The educational practice is aimed at familiarizing students with the logistics of the enterprise / workshop / laboratory, software and modern methods of analyzing raw materials.

During the training practice, regardless of the place of its passage, students should pay special attention to issues related to life safety, labor protection and industrial sanitation. For this, it is necessary to consider the principles of state and public control over the observance of labor legislation, the organization of the life safety service and its tasks.

An individual assignment (Appendix 1) is issued to the student at the university by the practice leader before the practice begins. It should be associated with the technology of obtaining one of the types of meat products.

Control questions:

1. Give the characteristic, specialization and production profile of the food enterprise.

2. Describe the material and technical base, raw material zone and capacity of the enterprise.

3. What is the mode of operation of the enterprise (how many shifts per day, month)?

4. Describe the range of products.

5. Give a description of the production lines, describe the production scheme of the main names of products.

6. What is the role and importance of the laboratory in the enterprise?

7. What forms of magazines are presented in the laboratory and on the production sites of the enterprise?

8. What measures are being taken on labor safety, on sanitary-hygienic, fire-preventive measures at the enterprise?

9. How are finished products delivered to retail chains?

9. FORMS OF CERTIFICATION (BY THE RESULTS OF PRACTICE)

Before passing the training practice, the student receives an individual task from the head of practice from the university, the contents and volume of which are agreed upon with the head of the practice.

Based on the results of the practice, the student draws up a report on the passage of practice, participates in the final conference with the presentation of the results of the practice, after which she receives an offset with an assessment.

The practice report should contain the following elements:

- Title page (Appendix 3);
- Assignment and schedule of practice (Appendix 1);
- Introduction;

- Report on production activities in the process of internship;
- Sources of information;

The report is drawn up in accordance with the "Requirements for the design of written work performed by students and students of FEFU."

The volume of the report depends on the topic of the individual assignment.

Sample report structure

1. General information about the enterprise and its brief description (history, geographical location, list of main workshops, buildings and structures with an indication of their purpose; information about the main services of the enterprise).

2. The structure of the enterprise and its individual divisions, its raw material base.

3. The range of products and their characteristics. Regulatory documents for manufactured products. Design and operating capacity of the enterprise.

4. Individual task. The technological regulations for the production of one of the types of products (requirements for raw materials and finished products, formulation, methods of technochemical control, description of the main technological stages of production and methods of waste disposal).

5. Conclusion.

By agreement with the head of practice from the university and depending on the location of this type of practice, the structure of the report or its individual parts may change.

After graduation and preparation of the report in accordance with the requirements, the student submits his report to the defense of the head from the university. According to the results of the defense, a test is set with a rating (excellent, good, satisfactory, unsatisfactory):

“Excellent” - the necessary practical work skills and professional competencies provided for by the training program are fully formed, tasks are completed, the quality of their implementation is estimated by the number of points close to the maximum.

“Good” - the necessary practical work skills and professional competencies provided for by the training program are fully formed, the tasks are completed, the quality of execution of none of them is estimated by the minimum number of points, some types of tasks are completed with errors or not thoroughly enough.

“Satisfactory” - the necessary practical work skills and professional competencies are mainly formed, the gaps are not significant, some of the completed tasks contain errors.

“Unsatisfactory” - the necessary practical work skills and professional competencies provided for by the training program have not been formed, all completed training tasks contain gross errors, additional independent work on the report materials will not lead to any significant improvement in the quality of the tasks.

10. EDUCATIONAL AND METHODOLOGICAL AND INFORMATION SUPPORT OF PRODUCTION PRACTICE

Main literature:

1 Basic principles of processing raw materials of plant, animal, microbiological origin and fish: method. directions for students special. 240902 "Food biotechnology" of all forms of education / comp. E.V. Makarova, Vladivostok: Publishing House of the Pacific Economic University, 2009. - 80 p.
<http://lib.dvfu.ru:8080/lib/item?id=chamo:356130&theme=FEFU>

2 Measuring methods for monitoring indicators of quality and safety of food: [study guide] [in 2 hours]: part 1. Products of plant origin /

V.V. Shevchenko, A.A. Vytovtov, L.P. Nilova [et al.]. St. Petersburg: Trinity Bridge, 2009. -- 303 p.
<http://lib.dvfu.ru:8080/lib/item?id=chamo:358418&theme=FEFU>

3 Examination of specialized food products. Quality and safety: a textbook for universities / [L. A. Mayurnikova, V. M. Poznyakovsky, B. P. Sukhanov and others]; under the general. ed. V.M. Poznyakovsky. St. Petersburg: GIORD, 2012. -- 421 p.
<http://lib.dvfu.ru:8080/lib/item?id=chamo:664633&theme=FEFU>

4 Training and industrial practice [Electronic resource]: guidelines / - Electron. textual data. — Kazan: Kazan National Research Technological University, 2016.— 52 p.
<http://www.iprbookshop.ru/63521.html>

5 Belozerova, M.S. Educational practice [Electronic resource]: teaching aid / M.S. Belozerova. - The electron. Dan. - St. Petersburg: NRU ITMO, 2016. -- 34 p. <https://e.lanbook.com/book/91457>

6 Introduction to the direction. Biotechnology [Electronic resource]: study guide / L.S. Dyshlyuk [et al.]. - The electron. Dan. - Kemerovo: KemSU, 2014. -- 157 p. <https://e.lanbook.com/book/60191>

Krasnikova L.V. Microbiological safety of food raw materials and finished products [Electronic resource]: teaching aid / Krasnikova L.V., Gunkova P.I. - The electron. text data. - St. Petersburg: ITMO University, Institute of Refrigeration and Biotechnology, 2014. - 89 c.
<http://www.iprbookshop.ru/67301.html>

Additional:

1 Auerman, L.Ya. Technology of baking production: Textbook / L.Ya. Auerman. - 9th ed., Revised. and add. / Under the total. ed. L.I. Puchkova. - St. Petersburg: Profession, 2009. -- 416 p.
<http://lib.dvfu.ru:8080/lib/item?id=chamo:316025&theme=FEFU>

2 Borisenko, L.A. Biotechnological basis for the intensification of production of salted meat products / A.A. Borisenko, A.A. Bratsikhin. - M.: DeLi print, 2010. -- 163 p.
<http://lib.dvfu.ru:8080/lib/item?id=chamo:342770&theme=FEFU>

3 Ivashov, V.I. Technological equipment for meat industry enterprises: a textbook for high schools / V.I. Ivashov. - St. Petersburg.: GIORD, 2010. - 736 pp.
<Http://lib.dvfu.ru:8080/lib/item?id=chamo{59114&theme=FEFU>

4 Rogov, I.A. General technology of meat and meat products / I.A. Rogov, A.G. Zabashta, G.P. Kazyulin. - M.: KolosS, 2010. -- 367 p.
<http://lib.dvfu.ru:8080/lib/item?id=chamo{40686&theme=FEFU>

The list of resources of the information and telecommunication network "Internet".

1. <http://elibrary.ru> Scientific Electronic Library eLIBRARY.RU
2. The electronic library system "Doe" <http://e.lanbook.com/>
3. The electronic library system "IPRBOOK" <http://www.iprbookshop.ru>
4. Scopus database: <http://www.scopus.com/home.url>
5. Web of Science database <http://apps.webofknowledge.com/>
6. Database of full-texting academic journals in China <http://oversea.cnki.net/>
7. The electronic library of dissertations of the Russian State Library <http://diss.rsl.ru/>
8. EBSCO Electronic Databases <http://search.ebscohost.com/>

11. MATERIAL AND TECHNICAL SUPPORT OF PRODUCTION AND TECHNOLOGICAL PRACTICE

The practice bases may be workshops and laboratories of industrial enterprises of food and processing profile (meat processing enterprises) equipped with modern technological equipment and testing instruments that allow controlling the quality of raw materials and manufactured products, laboratories for analyzing and evaluating the quality of food products.

Approximate practice bases: Vladkhleb OJSC bread production enterprise; enterprises for the production of milk and dairy products: LLC Artyomovsky Dairy Plant, LLC Arsenyevsky Dairy Plant, LLC HAPK Green Agro; enterprises for the production of meat and sausages: LLC "Elephant", LLC "Good deed", LLC "Nikolsk", LLC "Ratimir"; Confectionery company: Primorsky Confectioner OJSC, etc.

The material and technical support for the implementation of the practice on the basis of the Department of Food Sciences and Technologies includes lecture halls and practical classes equipped with multimedia equipment and corresponding to sanitary and opposing rules and norms.

№ п/п	Name of special rooms and premises for independent work	Equipped with special rooms and rooms for independent work
3	690022, Primorsky Territory, Vladivostok, Russky Island, Saperny Peninsula, village of Ajax 10, auditorium M 311. M311- The classroom for lecture-type classes, seminar-type classes, group and individual consultations, ongoing monitoring and interim certification.	Training furniture for 25 workplaces, teacher's place (table, chair), Analytical and technological equipment (M311): Milk centrifuge with heating IJIM 1-12; Liquid thermostat LOIP Lt-208a, volume 8l, 120x150 / 200mm; Analyzer of milk quality Lactan 1-4 mod. 230; PH-millivolmeter with tripod pH-150MI; VSP 1.5-2-3T scales; Refrigerator "Ocean-RFD-325B"; Drying cabinet, stainless steel chamber. steel, 58l; electric stove 111CH 101-226589; PE-6110 magnetic stirrer with heating; VNZh-0,3-KhS3 viscometer (d-1.41) glass capillary; Tripod PE-

		<p>2710 lab. for burettes.</p> <p>Multimedia equipment: Monoblock Lenovo C360G-i34164G500UDK; Screen with electric 236 * 147 cm Trim Screen Line; DLP projector, 3000 ANSI Lm, WXGA 1280x800, 2000: 1 EW330U Mitsubishi; Subsystem of specialized hardware mounts CORSA-2007 Tuarex; Video Switching Subsystem: DVI DXP 44 DVI Pro Extron matrix switcher; Extender DVI over twisted pair DVI 201 Tx / Rx; Subsystem of audio switching and sound reinforcement; ceiling mount speaker SI 3CT LP Extron; Sennheiser EW 122 G3 UHF Microphone Lavalier Radio System with a wireless microphone and receiver; DMP 44 LC Extron digital audio processor; Extron IPL T S4 Network Management Controller; Wireless LANs for students are provided with a system based on 802.11a / b / g / n 2x2 MIMO (2SS) access points.</p>
4	<p>690022, Primorsky Territory, Vladivostok, Russky Island, Saperny Peninsula, village of Ajax 10, auditorium M621.</p> <p>M621- The classroom for the implementation of design work, lecture-type classes, seminar-type classes, group and individual consultations, ongoing monitoring and interim certification.</p>	<p>Training furniture for 17 workplaces, Teacher's place (table, chair), Computer class: Monoblock Lenovo C360G-i34164G500UDK 19.5 "Intel Core i3-4160T 4GB DDR3-1600 SODIMM (1x4GB) 500GB Windows Seven Enterprise - 17 pcs; Wired LAN - Cisco 800 series; Wireless LAN for students is provided with a system based on 802.11a / b / g / n 2x2 MIMO (2SS) access points.</p>
6	<p>690922, Primorsky Territory, Vladivostok, Russky Island, Saperny Peninsula, village of Ajax, 10, building A, aud. A1017.</p> <p>Reading rooms of the FEFU Scientific Library with open access to the fund (building A - level 10) Audience for independent work of graduate students.</p>	<p>The room is equipped with specialized training furniture (seats - 15)</p> <p>Equipment: Monoblock Lenovo C360G-i34164G500UDK - 15 pcs. Integrated Polymedia FlipBox Touchscreen Display - 1 pc. Copier-printer-color scanner in e-mail with 4 trays Xerox WorkCentre 5330 (WC5330C - 1</p>

	pc.
--	-----

For people with disabilities and people with disabilities, the choice of practice places is consistent with the requirement of their accessibility for these students and the practice is conducted taking into account the peculiarities of their psychophysical development, individual capabilities and health status.

In order to ensure special conditions for the training of disabled and disabled people in FEFU, all buildings are equipped with ramps, elevators, lifts, specialized places, equipped with toilets, information and navigation support signs.

Compiled by (s):

Professor of the Department of Food Sciences and Technology,
Doctor of Biological Sciences, Professor Kalenik T.K.

Associate professor, Department of Food Sciences and Technology
E. Motkina

The practice program was discussed at a meeting of the Department of Food Sciences and Technology, protocol No. 1 dated July 11, 2018.



MINISTRY OF EDUCATION AND SCIENCE OF THE RUSSIAN
FEDERATION
Federal state autonomous educational institution
of higher education
«Far Eastern Federal University»
(FEFU)

SCHOOL OF BIOMEDICINE

«AGREED»
Head of education program

_____ FULL NAME.
"___" _____ 20__

INDIVIDUAL JOB

By _____

(Type of practice)

Student ___ group's _____

(Name of student)

Educational program 19.04.01 "Biotechnology"

Base (place, organization) of practice

Duration of practice from _____ 20__ Y. To _____ 20__ Y

Generalized wording of the assignment	
---------------------------------------	--

Task Schedule

The name of the tasks (activities) that make up the task	Date of completion of the task (event)
1.	
2.	
3.	

Head of Practice _____

signature full name, position

Practice Diary Example
Far Eastern Federal University
School of Biomedicine

Head of Practice from FEFU

Head of practice from the host organization

A DIARY

By _____ practice

Student _____ course _____
group

By program _____

Place of Practice

Duration of practice _____ weeks

1. Student calendar

№ п/п	Name of work	Calendar dates		Surname of head of practice
		start	ending	

2. Student work diary

date of	Summary of work intern	Signature a manager

3. Report protection results

The report is protected by _____ 20____

With a rating of _____

Director of DPNiT _____ Full name

Practice report title page form



MINISTRY OF EDUCATION AND SCIENCE OF THE RUSSIAN
FEDERATION

Federal state autonomous educational institution
of higher education

«Far Eastern Federal University»
(FEFU)

SCHOOL OF BIOMEDICINE

The report is protected with a rating of _____
" _____ " _____ 20__ Y

Director of DPNiT

_____ Surname I.O.

REPORT

on the passage of industrial and technological practice in

(full name of the enterprise)

Student gr. _____ groups _____ (_____)
Signature full name

Supervisor
from the university _____ (_____)
Signature full name



MINISTRY OF EDUCATION AND SCIENCE OF THE RUSSIAN
FEDERATION
Federal state autonomous educational institution
of higher education
«Far Eastern Federal University»
(FEFU)

SCHOOL OF BIOMEDICINE

N A P R A V L E N I E

To practice _____

Student of the master course

_____ Last name First name _____ group
(Full Name)

Seconded to _____

Name of base organization

Address _____

Order on referral to practical training No. _____

For passing _____

In the direction of preparation 19.04.01 Biotechnology for a period from
_____ 201 to _____ 201 (continuous / discrete)

Head of Practice

Professional skills and experience in
Professional activity

M.P. _____

(Position, academic title) (Signature) (Full name)

Marks on the implementation and terms of practice

Company name	Arrival and Departure Mark	Signature, decryption of signature, stamp
Name of enterprise, organization in accordance with the contract	<i>Arrived</i> __.__.20__ г.	
	<i>Arrived</i> __.__.20__ г.	

Head of Practice _____


signature full name, position



МИНИСТЕРСТВО НАУКИ И ВЫСШЕГО ОБРАЗОВАНИЯ РОССИЙСКОЙ ФЕДЕРАЦИИ
Федеральное государственное автономное образовательное учреждение высшего образования
«Дальневосточный федеральный университет»
(ДВФУ)
ШКОЛА БИОМЕДИЦИНЫ

«СОГЛАСОВАНО»

Руководитель ОП


Каленик Т.К.

(подпись) (Ф.И.О. рук. ОП)

«12» июля 2018 г.

«УТВЕРЖДАЮ»

Директор Департамента
пищевых наук и технологий


Ю.В. Приходько

(подпись) (Ф.И.О.)

«12» июля 2018 г.

**РАБОЧАЯ ПРОГРАММА
НАУЧНО-ИССЛЕДОВАТЕЛЬСКОЙ РАБОТЫ**

**RESEARCH SEMINAR: ACTUAL PROBLEMS OF AGRI-FOOD
BIOTECHNOLOGY IN THE FAR EAST OF RUSSIA / НАУЧНО-
ИССЛЕДОВАТЕЛЬСКИЙ СЕМИНАР: АКТУАЛЬНЫЕ ПРОБЛЕМЫ
АГРОПИЩЕВОЙ БИОТЕХНОЛОГИИ В АЗИАТСКО-ТИХООКЕАНСКОМ
РЕГИОНЕ**

(наименование научно-исследовательской работы)

Направление подготовки 19.04.01 Биотехнология
Профиль подготовки Agri-Food Biotechnology

Квалификация (степень) выпускника магистр
(бакалавр, магистр, специалист)

г. Владивосток
2018

1. General provisions of the Program

1.1. This Program is developed in accordance with the current legislation in the field of science and innovation.

1.2. Research work is an obligatory section of the main educational program for the training of masters and is aimed at the formation of professional competencies in accordance with the educational standard independently established by the FEFU, approved by order of the rector dated 07.07.2015 No. 12-13-1282.

1.3. The student's research seminar includes research work in the semester (work within the framework of a scientific seminar, preparation of term papers, writing scientific articles, participation in scientific events), research practice, preparation and defense of final qualification work.

1.4. The volume (total number) of hours allocated to research work is determined by the educational standards of higher education in the areas of training and curricula.

1.5. The content of the research work of students is determined in accordance with the profile of the training program, the subject of scientific research of the Department, contractual topics and more. Specific types, forms of research work and the timing of their implementation are indicated in the individual plan of the student's research work.

1.6. An individual plan is developed by the student in conjunction with the supervisor for each academic year, taking into account semester work and approved by the student's supervisor (Appendix 1).

1.7. The general management of the research work on the program is carried out by the head of the educational program. The direct

management of the research work of students is carried out by supervisors appointed in accordance with the order of the principal.

1.8. The organization of the research practice of undergraduates is carried out in accordance with the Regulation on Practices in FEFU.

2. The goals and objectives of the research work

2.1. The goal of the research work in the semester is to form the student's skills and develop the competencies of the research work, allowing to conduct research work both individually and in a team.

2.2. The research work in the semester (Research Seminar) is carried out by the student - under the guidance of the supervisor. The direction of the student's research work is determined in accordance with the profile of the master's training program.

2.3. Research work (Research Seminar) should ensure that students acquire professional competencies:

- OPK-1 ability to professionally use modern biotechnological equipment and scientific instruments;

- OPK-2 readiness for communication in oral and written forms in the state language of the Russian Federation and a foreign language for solving problems;

- OPK-4 readiness to use methods of mathematical modeling of materials and technological processes, readiness for theoretical analysis and experimental verification of theoretical hypotheses;

- OPK-5 ability to use modern information technology to collect, process and disseminate scientific information in the field of biotechnology and related industries, the ability to use databases, software products and resources of the information and telecommunication network "Internet" (hereinafter - the "Internet" network) to solve tasks of professional activity;

- OPK-6 readiness to protect intellectual property and commercialization of rights to intellectual property;

- PK-1 readiness for planning, organizing and conducting research in the field of biotechnology, the ability to correctly process the results of experiments and make informed conclusions and conclusions;

- PC-2 ability to analyze scientific and technical information in the field of biotechnology and related disciplines with the aim of scientific, patent and marketing support for ongoing basic research and technological development;

- PC-3 the ability to present the results of the work performed in the form of scientific and technical reports, reviews, scientific reports and publications using modern capabilities of information technology and taking into account the requirements for the protection of intellectual property;

- PK-9 readiness to use the basic principles of organization of metrological support of production.

2.4. The following types and stages of the implementation and control of the student's research work are provided:

- planning of research work, including familiarization with the topic of research in this area and the main trends in the development of scientific research, and the choice of research topic;

- selection, development and conduct of research work in the chosen direction;

- adjustment of the research plan;

- preparation of a report on research work;

- protection of the work performed.

The main form of planning and adjustment of individual plans for research work of students is the substantiation of the topic, discussion of

the plan and the intermediate results of the study in the framework of the research seminar.

2.5. According to the results of research work, the student should:

Know:

- Main scientific problems of agricultural biotechnology, its role and place in modern biotechnology;

- The degree of scientific development of the investigated problem in the field of biotechnology of products from raw materials of plant and animal origin;

- The specifics of the technical presentation of scientific material;

Own:

- Current issues of the biotechnological branch of knowledge;

- Basic biotechnological methods for creating new food products;

- Skills of scientific discussion;

Be able to:

- apply modern methods of food analysis in scientific research;

- Practically carry out scientific research, experimental work in their scientific field related to the implementation of qualification work;

- Search for bibliographic sources in both Russian and foreign databases;

Work with information software products and Internet resources, etc.

3. Organization of research work

3.1. Research work (Research Seminar) in the semester can be carried out in the following forms:

- Fulfillment of the tasks of the supervisor in accordance with the approved individual plan of research work (Appendix 2);

- Participation in scientific events of FEFU, the School of Biomedicine and the Department of Food Science and Technology;
- preparation of reports and speeches at scientific conferences, seminars, symposiums and other scientific events at the regional, all-Russian and international levels;
- preparation and publication of abstracts of reports, scientific articles;
- participation in research projects carried out at the university as part of research programs,
- preparation and defense of qualification work.

3.2. The content of the research work (Research Seminar)

The research seminar is included in Block 2 “Practices, including research work (R&D)” of the educational standard independently established by FEFU, direction 19.04.01 “Biotechnology”, which was adopted by the decision of the FEFU Academic Council, protocol No. 06-15 dated 04.06.2015, and entered into force by order of the rector of the FEFU on 07.07.2015 No. 12-13-1282, is mandatory, variable and represents a type of training session that is directly oriented to the professional and practical training of students.

Method of conducting research: dispersed (108 hours in the 2nd year), the classroom load is 18 hours.

3.2.1 Research work in the first semester:

- Planning research work.
- Approval of an individual research plan.
- The selection and approval of the research direction, the justification of relevance and theoretical significance, the study of the degree of scientific development of the problems, writing an abstract or article on a selected topic.

- Analysis of the main results and provisions obtained by leading experts in the study of food products of animal origin (meat and meat products).

3.2.2 Plan of the classroom load as part of the Research Seminar:

Theme 1.1 Biotechnology, including agri-food biotechnology. Terms and definitions (2 hours);

Theme 1.2 Actual problems of agri-food biotechnology in the Far East of Russia (4 hours);

Theme 1.3. Main research areas in agri-food biotechnology (2 hours);

Theme 1.4 Setting goals and objectives of scientific research in agri-food biotechnology (2 hours);

Theme 1.5 Organization of work with scientific literature (2 hours);

Theme 1.6. Results of research work. Intellectual property protection (4 hours);

Theme 1.7 Preparation of a report on research work (2 hours);

3.3. Certification Form

For certification according to the results of research, the student must provide a report on research (the form of the title page in Appendix 1) with a mark of the head.

Certification based on the results of research is carried out in the form of a report protection in the form of a presentation. Reporting form "offset with assessment".

According to the results of the defense, a test is set with a rating (excellent, good, satisfactory, unsatisfactory):

“Excellent” - the necessary practical work skills and professional competencies provided for by the training program are fully formed, tasks

are completed, the quality of their implementation is estimated by the number of points close to the maximum.

“Good” - the necessary practical work skills and professional competencies provided for by the training program are fully formed, the tasks are completed, the quality of execution of none of them is estimated by the minimum number of points, some types of tasks are completed with errors or not thoroughly enough.

“Satisfactory” - the necessary practical work skills and professional competencies are mainly formed, the gaps are not significant, some of the completed tasks contain errors.

“Unsatisfactory” - the necessary practical work skills and professional competencies provided for by the training program have not been formed, all completed training tasks contain gross errors, additional independent work on the report materials will not lead to any significant improvement in the quality of the tasks.

4. Educational-methodical and informational support of research

Main literature:

1. Biotechnology: a textbook for agricultural universities / V. A. Chkhenkeli. St. Petersburg: Prospect of Science, 2014 .-- 335 p. <http://lib.dvfu.ru:8080/lib/item?id=chamo:785504&theme=FEFU>

2. General biology and microbiology: guidelines for laboratory work, part 3 / Pacific State University of Economics; [comp. : J. G. Prokopets, E. S. Fischenko, S. V. Zhuravlev]. Vladivostok: Publishing House of the Pacific Economic University, 2010. - 44 p. <http://lib.dvfu.ru:8080/lib/item?id=chamohaps5757292&theme=FEFU>

3. Sarafanova, L.A. Nutritional Supplements: Encyclopedia - 3rd ed., Revised. and add. / L.A. Sarafanova. - St. Petersburg: Profession,

2011 .-- 776 p.
<http://lib.dvfu.ru:8080/lib/item?id=chamo:342063&theme=FEFU>

4. Chemistry of food products: Per. from English / ed. : Srinivasan Damodaran, Kirk L. Parkin, Owen R. Fennema. St. Petersburg: Profession, 2012 .-- 1039 p.
<http://lib.dvfu.ru:8080/lib/item?id=chamo:675478&theme=FEFU>

Additional literature:

1 Auerman, L.Ya. Technology of baking production: Textbook / L.Ya. Auerman. - 9th ed., Revised. and add. / Under the total. ed. L.I. Puchkova. - St. Petersburg: Profession, 2009 .-- 416 p.
<http://lib.dvfu.ru:8080/lib/item?id=chamo:316025&theme=FEFU>

2 Borisenko, L.A. Biotechnological basis for the intensification of production of salted meat products / A.A. Borisenko, A.A. Bratsikhin. - M.: DeLi print, 2010 .-- 163 p.
<http://lib.dvfu.ru:8080/lib/item?id=chamo:342770&theme=FEFU>

3 Ivashov, V.I. Technological equipment for meat industry enterprises: a textbook for high schools / V.I. Ivashov. - St. Petersburg.: GIORD, 2010. - 736 pp.
[Http://lib.dvfu.ru:8080/lib/item?id=chamo:59114&theme=FEFU](http://lib.dvfu.ru:8080/lib/item?id=chamo:59114&theme=FEFU)

4 Rogov, I.A. General technology of meat and meat products / I.A. Rogov, A.G. Zabashita, G.P. Kazyulin. - M.: KolosS, 2010 .-- 367 p.
<http://lib.dvfu.ru:8080/lib/item?id=chamo:40686&theme=FEFU>

5 Krus, G.N. Technology of milk dairy products: Textbook / G.N. Krus, A.G. Khramtsov, S.V. Volokitina, S.V. Karpychev; Ed. A.M. Shalyginoy. - M.: KolosS, 2006 .-- 455 p.
<http://lib.dvfu.ru:8080/lib/item?id=chamo:351156&theme=FEFU>

The list of resources of the information and telecommunication network "Internet"

1. <http://elibrary.ru> Scientific Electronic Library eLIBRARY.RU
2. The electronic library system "Doe" <http://e.lanbook.com/>
3. The electronic library system "IPRBOOK"
<http://www.iprbookshop.ru>
4. Scopus database: <http://www.scopus.com/home.url>
5. Web of Science database <http://apps.webofknowledge.com/>
6. Database of full-texting academic journals in China
<http://oversea.cnki.net/>
7. The electronic library of dissertations of the Russian State Library <http://diss.rsl.ru/>
8. EBSCO Electronic Databases <http://search.ebscohost.com/>

Compiled by (s):

Associate professor, Department of Food Sciences and Technology, T. Senotrusova

The practice program was discussed at a meeting of the Department of Food Sciences and Technology, protocol No. 6 dated July 12, 2018.

Research report title page form



MINISTRY OF EDUCATION AND SCIENCE OF THE RUSSIAN
FEDERATION
Federal state autonomous educational institution
of higher education
«Far Eastern Federal University»
(FEFU)

SCHOOL OF BIOMEDICINE

The report is protected with a rating of _____
"_____" _____ 20__ Y

Director of DPNiT
_____ full name.

REPORT

On practical training (Research work) on the topic

(Full name of the enterprise)

Student gr. _____ groups _____ (_____)
Signature full name

Supervisor
from the university _____ (_____)
Signature full name



MINISTRY OF EDUCATION AND SCIENCE OF THE RUSSIAN
FEDERATION

Federal state autonomous educational institution
of higher education

«Far Eastern Federal University»
(FEFU)

SCHOOL OF BIOMEDICINE

«AGREED»

Head of education program

_____ FULL NAME.

"__" "_____" 20__

INDIVIDUAL JOB

By _____

(Type of practice)

Student ____ group's _____

(Name of student)

Educational program 19.04.01 "Biotechnology"

Base (place, organization) of practice

Duration of practice from _____ 20__ Y. To _____ 20__ Y

Generalized wording of the assignment	
---------------------------------------	--

Task Schedule

The name of the tasks (activities) that make up the task	Date of completion of the task (event)
1.	
2.	
3.	

Head of Practice _____

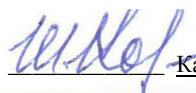
signature full name, position



МИНИСТЕРСТВО НАУКИ И ВЫСШЕГО ОБРАЗОВАНИЯ РОССИЙСКОЙ ФЕДЕРАЦИИ
Федеральное государственное автономное образовательное учреждение высшего образования
«Дальневосточный федеральный университет»
(ДВФУ)
ШКОЛА БИОМЕДИЦИНЫ

«СОГЛАСОВАНО»

Руководитель ОП

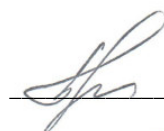

Каленик Т.К.

(подпись) (Ф.И.О. рук. ОП)

«12» июля 2018 г.

«УТВЕРЖДАЮ»

Директор Департамента
пищевых наук и технологий


Ю.В. Приходько

(подпись) (Ф.И.О.)

«12» июля 2018 г.

РАБОЧАЯ ПРОГРАММА ПРАКТИКИ

RESEARCH WORK / НАУЧНО-ИССЛЕДОВАТЕЛЬСКАЯ РАБОТА
(наименование производственной практики)

Направление подготовки 19.04.01 Биотехнология
Профиль подготовки Agri-Food Biotechnology

Квалификация (степень) выпускника магистр
(бакалавр, магистр, специалист)

г. Владивосток
2018

1. General provisions of the Program

1.1. This Program is developed in accordance with the current legislation in the field of science and innovation.

1.2. Research work is an obligatory section of the main educational program for the training of masters and is aimed at the formation of professional competencies in accordance with the requirements of the educational standard, independently established by the Far East Federal University, a federal state autonomous educational institution of higher education, which was adopted by the decision of the FEFU Academic Council, protocol No. 06-15 from 06/04/2015, and entered into force by order of the rector of the Far East U dated 07.07.2015 № 12-13-1282.

1.3. The student's research work includes research work in the semester (work within the framework of a scientific seminar, preparation of term papers, writing scientific articles, participation in scientific events), research practice, preparation and defense of the final qualification work (master's thesis).

1.4. The volume (total number) of hours allocated to research work is determined by the educational standards of higher education in the areas of training and curricula.

1.5. The content of the research work of students is determined in accordance with the profile of the training program, the topic of scientific research of the department, contractual topics and more. Specific types, forms of research work and the timing of their implementation are indicated in the individual plan of the student's research work.

1.6. An individual plan is developed by the student in conjunction with the supervisor for each academic year, taking into account semester work and approved by the student's supervisor (Appendix 1).

1.7. The general management of the research work on the program is carried out by the head of the educational program. The direct management of the research work of students is carried out by supervisors appointed in accordance with the order of the principal.

1.8. The organization of the research practice of undergraduates is carried out in accordance with the Regulation on Practices in FEFU.

2. The goals and objectives of the research work

2.1. The goal of the research work in the semester is to form the student's skills and develop the competencies of the research work, allowing to conduct research work both individually and in a team.

2.2. The research work in the semester is carried out by the student - under the guidance of the supervisor. The direction of the student's research work is determined in accordance with the profile of the master's training program.

2.3. Research work should ensure the acquisition by students of professional competencies:

- OPK-1 ability to professionally use modern biotechnological equipment and scientific instruments;

- OPK-2 readiness for communication in oral and written forms in the state language of the Russian Federation and a foreign language for solving problems;

- OPK-4 readiness to use methods of mathematical modeling of materials and technological processes, readiness for theoretical analysis and experimental verification of theoretical hypotheses;

- OPK-5 ability to use modern information technology to collect, process and disseminate scientific information in the field of biotechnology and related industries, the ability to use databases, software products and resources of the information and telecommunication network "Internet" (hereinafter - the "Internet" network) to solve tasks of professional activity;

- OPK-6 readiness to protect intellectual property and commercialization of rights to intellectual property;

- PK-1 readiness for planning, organizing and conducting research in the field of biotechnology, the ability to correctly process the results of experiments and make informed conclusions and conclusions;

- PC-2 ability to analyze scientific and technical information in the field of biotechnology and related disciplines with the aim of scientific, patent and marketing support for ongoing basic research and technological development;

- PC-3 the ability to present the results of the work performed in the form of scientific and technical reports, reviews, scientific reports and publications using modern capabilities of information technology and taking into account the requirements for the protection of intellectual property;

- PK-9 readiness to use the basic principles of organization of metrological support of production.

2.4. The following types and stages of the implementation and control of the student's research work are provided:

- planning of research work, including familiarization with the topic of research in this area and the main trends in the development of scientific research, and the choice of research topic;

- Selection, development and conduct of research work in the chosen direction;

- Adjustment of the research plan;

- Preparation of a report on research work;

- Protection of the work performed.

The main form of planning and adjustment of individual plans for research work of students is the substantiation of the topic, discussion of the plan and the intermediate results of the study in the framework of the research seminar.

2.5. According to the results of research work, the student should:

Know:

- Main scientific problems of agricultural biotechnology, its role and place in modern biotechnology;

- The degree of scientific development of the investigated problem in the field of biotechnology of products from raw materials of plant and animal origin;

- The specifics of the technical presentation of scientific material;

Own:

- Current issues of the biotechnological branch of knowledge;
- basic biotechnological methods for creating new food products;
- skills of scientific discussion;

Be able to:

- apply modern methods of food analysis in scientific research;
- practically carry out scientific research, experimental work in their scientific field related to the implementation of qualification work;
- search for bibliographic sources in both Russian and foreign databases;
- Work with information software products and Internet resources, etc.

3. Organization of research work

3.1. Research work in the semester can be carried out in the following forms:

- Fulfillment of the tasks of the supervisor in accordance with the approved individual plan of research work (Appendix 2);

- Participation in scientific events at FEFU, the School of Biomedicine and the Department of Biotechnology and Functional Nutrition;

- preparation of reports and speeches at scientific conferences, seminars, symposiums and other scientific events at the regional, all-Russian and international levels;

- Preparation and publication of abstracts of reports, scientific articles;

- Participation in research projects carried out at the university as part of research programs,

- Preparation and defense of qualification work.

3.2. The content of the research work

The research work is included in the block 2 “Practices” of the educational standard, independently established by the Far Eastern Federal University, a federal state autonomous educational institution of higher education in the direction of “Biotechnology” on April 19, 01, which was adopted by the decision of the FEFU Academic Council, protocol No. 06- 15 dated 04.06.2015, and entered into force by order of the rector of the FEFU on 07.07.2015 No. 12-13-1282., Is obligatory, variable and represents a type of training session, directly oriented trained on professional and practical training of students.

Method of conducting research: dispersed (in the third semester 216 hours and 180 hours in the fourth semester of 2 courses).

3.2.1 Research work in the third semester:

- Planning of research work and approval of an individual plan of research work.

- Choice and approval of the research direction, justification of relevance and theoretical significance, the study of the degree of scientific development of the problem

- selection, processing and analysis of scientific, technical and patent information on research topics using specialized databases using information technology.

- writing an abstract or review article on a selected topic.

3.2.2 Research work in the fourth semester:

- search and development of new effective ways to obtain biotechnological products, the creation of modern biotechnology, including nanobiotechnology, recombinant deoxyribonucleic acid technology, cell technology;

- isolation, identification and analysis of biosynthesis and biotransformation products, obtaining new strains producing biological preparations;

- the study of biochemical and biological laws of biosynthesis, micro- and macrostoichiometry, micro- and macrokinetics of the growth of populations of microorganisms and cell cultures, the interaction of microorganisms, viruses with

cells, metabolic pathways and the characteristics of substrate utilization and synthesis of metabolic products.

- preparation of a report on research and its protection.

3.3. Certification Form

For certification according to the results of research, the student must provide a report on research (the form of the title page in Appendix 1) with a mark of the head.

Certification based on the results of research is carried out in the form of a report protection in the form of a presentation. Reporting form "offset with assessment".

According to the results of the defense, a test is set with a rating (excellent, good, satisfactory, unsatisfactory):

“Excellent” - the necessary practical work skills and professional competencies provided for by the training program are fully formed, tasks are completed, the quality of their implementation is estimated by the number of points close to the maximum.

“Good” - the necessary practical work skills and professional competencies provided for by the training program are fully formed, the tasks are completed, the quality of execution of none of them is estimated by the minimum number of points, some types of tasks are completed with errors or not thoroughly enough.

“Satisfactory” - the necessary practical work skills and professional competencies are mainly formed, the gaps are not significant, some of the completed tasks contain errors.

“Unsatisfactory” - the necessary practical work skills and professional competencies provided for by the training program have not been formed, all completed training tasks contain gross errors, additional independent work on the report materials will not lead to any significant improvement in the quality of the tasks.

4. Educational-methodical and informational support of research

Main literature:

1. Scientific research work of the student: educational-practical manual / N. M. Rozanova. Moscow: KnoRus, 2016 .-- 255 p. <http://lib.dvfu.ru:8080/lib/item?id=chamo:797721&theme=FEFU>

2. General biology and microbiology: guidelines for laboratory work, part 3 / Pacific State University of Economics; [comp. : J. G. Prokopets, E. S. Fischenko, S. V. Zhuravlev]. Vladivostok: Publishing House of the Pacific Economic University, 2010. - 44 p. <http://lib.dvfu.ru:8080/lib/item?id=chamohaps5757292&theme=FEFU>

3. Sarafanova, L.A. Nutritional Supplements: Encyclopedia - 3rd ed., Revised. and add. / L.A. Sarafanova. - St. Petersburg: Profession, 2011 .-- 776 p. <http://lib.dvfu.ru:8080/lib/item?id=chamo:342063&theme=FEFU>

4. Chemistry of food products: Per. from English / ed. : Srinivasan Damodaran, Kirk L. Parkin, Owen R. Fennema. St. Petersburg: Profession, 2012 .-- 1039 p. <http://lib.dvfu.ru:8080/lib/item?id=chamo:675478&theme=FEFU>

Additional literature:

1. Auerman, L.Ya. Technology of baking production: Textbook / L.Ya. Auerman. - 9th ed., Revised. and add. / Under the total. ed. L.I. Puchkova. - St. Petersburg: Profession, 2009 .-- 416 p. <http://lib.dvfu.ru:8080/lib/item?id=chamo:316025&theme=FEFU>

2 .Borisenko, L.A. Biotechnological basis for the intensification of production of salted meat products / A.A. Borisenko, A.A. Bratsikhin. - M .: DeLi print, 2010 .-- 163 p. <http://lib.dvfu.ru:8080/lib/item?id=chamo:342770&theme=FEFU>

3. Ivashov, V.I. Technological equipment for meat industry enterprises: a textbook for high schools / V.I. Ivashov. - St. Petersburg .: GIORD, 2010. - 736 pp. [Http://lib.dvfu.ru:8080/lib/item?id=chamo:59114&theme=FEFU](http://lib.dvfu.ru:8080/lib/item?id=chamo:59114&theme=FEFU)

4. Rogov, I.A. General technology of meat and meat products / I.A. Rogov, A.G. Zabashta, G.P. Kazyulin. - M.: KolosS, 2010 .-- 367 p.
<http://lib.dvfu.ru:8080/lib/item?id=chamo{40686&theme=FEFU>

5. Krus, G.N. Technology of milk dairy products: Textbook / G.N. Krus, A.G. Khramtsov, 3.V. Volokitina, S.V. Karpychev; Ed. A.M. Shalyginoy. - M: KolosS, 2006 .-- 455 p.
<http://lib.dvfu.ru:8080/lib/item?id=chamo:351156&theme=FEFU>

The list of resources of the information and telecommunication network "Internet".

1. <http://elibrary.ru> Scientific Electronic Library eLIBRARY.RU
2. The electronic library system "Doe" <http://e.lanbook.com/>
3. The electronic library system "IPRBOOK" <http://www.iprbookshop.ru>
4. Scopushttp database: [//www.scopus.com/home.url](http://www.scopus.com/home.url)
5. Web of Science database <http://apps.webofknowledge.com/>
6. Database of full-texting academic journals in China
<http://oversea.cnki.net/>
7. The electronic library of dissertations of the Russian State Library
<http://diss.rsl.ru/>
8. EBSCO Electronic Databases <http://search.ebscohost.com/>

Compiled by (s):

Professor of the Department of Food Sciences and Technology, Doctor of Biological Sciences, Professor Kalenik T.K.

Assistant professor, Department of Food Sciences and Technology, T. Senotrusova

The practice program was discussed at a meeting of the Department of Food Sciences and Technology, protocol No. 1 dated July 11, 2018.

Research report title page form



MINISTRY OF EDUCATION AND SCIENCE OF THE RUSSIAN
FEDERATION

Federal state autonomous educational institution
of higher education

«Far Eastern Federal University»
(FEFU)

SCHOOL OF BIOMEDICINE

The report is protected with a rating of _____
" _____ " _____ 20__ Y

Director of DPNiT

_____ Full name

REPORT

On practical training (Research work) on the topic

(Full name of the enterprise)

Student gr. _____ groups _____ (_____)
Signature full name

Supervisor
from the university _____ (_____)
Signature full name



MINISTRY OF EDUCATION AND SCIENCE OF THE RUSSIAN
FEDERATION
Federal state autonomous educational institution
of higher education
«Far Eastern Federal University»
(FEFU)

SCHOOL OF BIOMEDICINE

«AGREED»
Head of education program

_____ FULL NAME.
"___" _____ 20__

INDIVIDUAL JOB

By _____

(Type of practice)

Student ___ group's _____

(Name of student)

Educational program 19.04.01 "Biotechnology"

Base (place, organization) of practice

Duration of practice from _____ 20__ Y. To _____ 20__ Y

Generalized wording of the assignment	
---------------------------------------	--

Task Schedule

The name of the tasks (activities) that make up the task	Date of completion of the task (event)
1.	
2.	
3.	

Head of Practice _____


signature full name, position



МИНИСТЕРСТВО НАУКИ И ВЫСШЕГО ОБРАЗОВАНИЯ РОССИЙСКОЙ ФЕДЕРАЦИИ
Федеральное государственное автономное образовательное учреждение высшего образования
«Дальневосточный федеральный университет»
(ДФУ)
ШКОЛА БИОМЕДИЦИНЫ

«СОГЛАСОВАНО»

Руководитель ОП

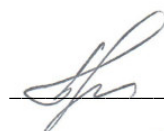
 Каленик Т.К.

(подпись) (Ф.И.О. рук. ОП)

«12» июля 2018 г.

«УТВЕРЖДАЮ»

Директор Департамента
пищевых наук и технологий

 Ю.В. Приходько

(подпись) (Ф.И.О.)

«12» июля 2018 г.

РАБОЧАЯ ПРОГРАММА ПРАКТИКИ

RESEARCH WORK / НАУЧНО-ИССЛЕДОВАТЕЛЬСКАЯ РАБОТА
(наименование производственной практики)

Направление подготовки 19.04.01 Биотехнология
Профиль подготовки Agri-Food Biotechnology

Квалификация (степень) выпускника магистр
(бакалавр, магистр, специалист)

г. Владивосток
2018

1. General provisions of the Program

1.1. This Program is developed in accordance with the current legislation in the field of science and innovation.

1.2. Research work is an obligatory section of the main educational program for the training of masters and is aimed at the formation of professional competencies in accordance with the requirements of the educational standard, independently established by the Far East Federal University, a federal state autonomous educational institution of higher education, which was adopted by the decision of the FEFU Academic Council, protocol No. 06-15 from 06/04/2015, and entered into force by order of the rector of the Far East U dated 07.07.2015 № 12-13-1282.

1.3. The student's research work includes research work in the semester (work within the framework of a scientific seminar, preparation of term papers, writing scientific articles, participation in scientific events), research practice, preparation and defense of the final qualification work (master's thesis).

1.4. The volume (total number) of hours allocated to research work is determined by the educational standards of higher education in the areas of training and curricula.

1.5. The content of the research work of students is determined in accordance with the profile of the training program, the topic of scientific research of the department, contractual topics and more. Specific types, forms of research work and the timing of their implementation are indicated in the individual plan of the student's research work.

1.6. An individual plan is developed by the student in conjunction with the supervisor for each academic year, taking into account semester work and approved by the student's supervisor (Appendix 1).

1.7. The general management of the research work on the program is carried out by the head of the educational program. The direct management of the research

work of students is carried out by supervisors appointed in accordance with the order of the principal.

1.8. The organization of the research practice of undergraduates is carried out in accordance with the Regulation on Practices in FEFU.

2. The goals and objectives of the research work

2.1. The goal of the research work in the semester is to form the student's skills and develop the competencies of the research work, allowing to conduct research work both individually and in a team.

2.2. The research work in the semester is carried out by the student - under the guidance of the supervisor. The direction of the student's research work is determined in accordance with the profile of the master's training program.

2.3. Research work should ensure the acquisition by students of professional competencies:

- OPK-1 ability to professionally use modern biotechnological equipment and scientific instruments;

- OPK-2 readiness for communication in oral and written forms in the state language of the Russian Federation and a foreign language for solving problems;

- OPK-4 readiness to use methods of mathematical modeling of materials and technological processes, readiness for theoretical analysis and experimental verification of theoretical hypotheses;

- OPK-5 ability to use modern information technology to collect, process and disseminate scientific information in the field of biotechnology and related industries, the ability to use databases, software products and resources of the information and telecommunication network "Internet" (hereinafter - the "Internet" network) to solve tasks of professional activity;

- OPK-6 readiness to protect intellectual property and commercialization of rights to intellectual property;

- PK-1 readiness for planning, organizing and conducting research in the field of biotechnology, the ability to correctly process the results of experiments and make informed conclusions and conclusions;

- PC-2 ability to analyze scientific and technical information in the field of biotechnology and related disciplines with the aim of scientific, patent and marketing support for ongoing basic research and technological development;

- PC-3 the ability to present the results of the work performed in the form of scientific and technical reports, reviews, scientific reports and publications using modern capabilities of information technology and taking into account the requirements for the protection of intellectual property;

- PK-9 readiness to use the basic principles of organization of metrological support of production.

2.4. The following types and stages of the implementation and control of the student's research work are provided:

- planning of research work, including familiarization with the topic of research in this area and the main trends in the development of scientific research, and the choice of research topic;

- Selection, development and conduct of research work in the chosen direction;

- Adjustment of the research plan;

- Preparation of a report on research work;

- Protection of the work performed.

The main form of planning and adjustment of individual plans for research work of students is the substantiation of the topic, discussion of the plan and the intermediate results of the study in the framework of the research seminar.

2.5. According to the results of research work, the student should:

Know:

main scientific problems of agricultural biotechnology, its role and place in modern biotechnology;

-the degree of scientific development of the investigated problem in the field of biotechnology of products from raw materials of plant and animal origin;

- The specifics of the technical presentation of scientific material;

Own:

- Current issues of the biotechnological branch of knowledge;

- Basic biotechnological methods for creating new food products;

- Skills of scientific discussion;

Be able to:

- apply modern methods of food analysis in scientific research;

- Practically carry out scientific research, experimental work in their scientific field related to the implementation of qualification work;

- Search for bibliographic sources in both Russian and foreign databases;

- work with information software products and Internet resources, etc.

3. Organization of research work

3.1. Research work in the semester can be carried out in the following forms:

- fulfillment of the tasks of the supervisor in accordance with the approved individual plan of research work (Appendix 2);

- Participation in scientific events at FEFU, the School of Biomedicine and the Department of Biotechnology and Functional Nutrition;

- preparation of reports and speeches at scientific conferences, seminars, symposiums and other scientific events at the regional, all-Russian and international levels;

- Preparation and publication of abstracts of reports, scientific articles;

- Participation in research projects carried out at the university as part of research programs,

- preparation and defense of qualification work.

3.2.1 The content of the research work

The research work is included in the block 2 “Practices” of the educational standard, independently established by the Far Eastern Federal University, a

federal state autonomous educational institution of higher education in the direction of “Biotechnology” on April 19, 01, which was adopted by the decision of the FEFU Academic Council, protocol No. 06- 15 dated 04.06.2015, and entered into force by order of the rector of the FEFU on 07.07.2015 No. 12-13-1282., Is obligatory, variable and represents a type of training session, directly oriented trained on professional and practical training of students.

Method of research: dispersed (in the 1st semester of the 1st course, 216 hours; in the 2nd semester of the 1st course, 468 hours).

3.2. Research work:

- Planning of research work and approval of an individual plan of research work.

- Choice and approval of the research direction, justification of relevance and theoretical significance, the study of the degree of scientific development of the problem

- Selection, processing and analysis of scientific, technical and patent information on research topics using specialized databases using information technology.

- writing an abstract or review article on a selected topic.

- Search and development of new effective ways to obtain biotechnological products, the creation of modern biotechnology, including nanobiotechnology, recombinant deoxyribonucleic acid technology, cell technology;

- Isolation, identification and analysis of biosynthesis and biotransformation products, obtaining new strains producing biological preparations;

- the study of biochemical and biological laws of biosynthesis, micro- and macrostoichiometry, micro- and macrokinetics of the growth of populations of microorganisms and cell cultures, the interaction of microorganisms, viruses with cells, metabolic pathways and the characteristics of substrate utilization and synthesis of metabolic products.

- Preparation of a report on research and its protection.

3.3. Certification Form

For certification according to the results of research, the student must provide a report on research (the form of the title page in Appendix 1) with a mark of the head.

Certification based on the results of research is carried out in the form of a report protection in the form of a presentation. Reporting form "offset with assessment".

According to the results of the defense, a test is set with a rating (excellent, good, satisfactory, unsatisfactory):

“Excellent” - the necessary practical work skills and professional competencies provided for by the training program are fully formed, tasks are completed, the quality of their implementation is estimated by the number of points close to the maximum.

“Good” - the necessary practical work skills and professional competencies provided for by the training program are fully formed, the tasks are completed, the quality of execution of none of them is estimated by the minimum number of points, some types of tasks are completed with errors or not thoroughly enough.

“Satisfactory” - the necessary practical work skills and professional competencies are mainly formed, the gaps are not significant, some of the completed tasks contain errors.

“Unsatisfactory” - the necessary practical work skills and professional competencies provided for by the training program have not been formed, all completed training tasks contain gross errors, additional independent work on the report materials will not lead to any significant improvement in the quality of the tasks.

4. Educational-methodical and informational support of research

Main literature:

1. Scientific research work of the student: educational-practical manual / N. M. Rozanova. Moscow: KnoRus, 2016 .-- 255 p.
<http://lib.dvfu.ru:8080/lib/item?id=chamo:797721&theme=FEFU>
2. General biology and microbiology: guidelines for laboratory work, part 3 / Pacific State University of Economics; [comp. : J. G. Prokopets, E. S. Fischenko, S. V. Zhuravlev]. Vladivostok: Publishing House of the Pacific Economic University, 2010. - 44 p.
<http://lib.dvfu.ru:8080/lib/item?id=chamohaps5757292&theme=FEFU>
3. Sarafanova, L.A. Nutritional Supplements: Encyclopedia - 3rd ed., Revised. and add. / L.A. Sarafanova. - St. Petersburg: Profession, 2011 .- 776 p.
<http://lib.dvfu.ru:8080/lib/item?id=chamo:342063&theme=FEFU>
4. Chemistry of food products: Per. from English / ed. : Srinivasan Damodaran, Kirk L. Parkin, Owen R. Fennema. St. Petersburg: Profession, 2012.- 1039p. <http://lib.dvfu.ru:8080/lib/item?id=chamo:675478&theme=FEFU>

Additional literature:

1. Auerman, L.Ya. Technology of baking production: Textbook / L.Ya. Auerman. - 9th ed., Revised. and add. / Under the total. ed. L.I. Puchkova. - St. Petersburg: Profession, 2009 .-- 416 p.
<http://lib.dvfu.ru:8080/lib/item?id=chamo:316025&theme=FEFU>
2. Borisenko, L.A. Biotechnological basis for the intensification of production of salted meat products / A.A. Borisenko, A.A. Bratsikhin. - M.: DeLi print, 2010 .-- 163 p.
<http://lib.dvfu.ru:8080/lib/item?id=chamo:342770&theme=FEFU>
3. Ivashov, V.I. Technological equipment for meat industry enterprises: a textbook for high schools / V.I. Ivashov. - St. Petersburg.: GIORD, 2010. - 736 pp. [Http://lib.dvfu.ru:8080/lib/item?id=chamo:59114&theme=FEFU](http://lib.dvfu.ru:8080/lib/item?id=chamo:59114&theme=FEFU)

4. Rogov, I.A. General technology of meat and meat products / I.A. Rogov, A.G. Zabashta, G.P. Kazyulin. - M.: KolosS, 2010 .-- 367 p.
<http://lib.dvfu.ru:8080/lib/item?id=chamo{40686&theme=FEFU>

5. Krus, G.N. Technology of milk dairy products: Textbook / G.N. Krus, A.G. Khramtsov, S.V. Volokitina, S.V. Karpychev; Ed. A.M. Shalyginoy. - M: KolosS, 2006 .-- 455 p.
<http://lib.dvfu.ru:8080/lib/item?id=chamo:351156&theme=FEFU>

**The list of resources of the information and telecommunication network
"Internet".**

1. <http://elibrary.ru> Scientific Electronic Library eLIBRARY.RU
2. The electronic library system "Doe" <http://e.lanbook.com/>
3. The electronic library system "IPRBOOK" <http://www.iprbookshop.ru>
4. Scopus [http database: //www.scopus.com/home.url](http://www.scopus.com/home.url)
5. Web of Science database <http://apps.webofknowledge.com/>
6. Database of full-texting academic journals in China
<http://oversea.cnki.net/>
7. The electronic library of dissertations of the Russian State Library
<http://diss.rsl.ru/>
8. EBSCO Electronic Databases <http://search.ebscohost.com/>

Compiled by (s):

Professor of the Department of Food Sciences and Technology, Doctor of Biological Sciences, Professor Kalenik T.K.

Associate professor of the Department of Food Sciences and Technology, Candidate of Medical Sciences, E. Motkina.

The practice program was discussed at a meeting of the Department of Food Sciences and Technology, protocol No. 1 dated July 11, 2018.

Research report title page form



MINISTRY OF EDUCATION AND SCIENCE OF THE RUSSIAN FEDERATION
Federal state autonomous educational institution
of higher education
«Far Eastern Federal University»
(FEFU)

SCHOOL OF BIOMEDICINE

The report is protected with a rating of _____
"_____" _____ 20__ Y

Director of DPNiT
_____ full name.

REPORT

On practical training (Research work) on the topic

(Full name of the enterprise)

Student gr. _____ groups _____ (_____)

Signature full name

Supervisor
from the university _____ (_____)

Signature full name



MINISTRY OF EDUCATION AND SCIENCE OF THE RUSSIAN FEDERATION
Federal state autonomous educational institution
of higher education
«Far Eastern Federal University»
(FEFU)

SCHOOL OF BIOMEDICINE

«AGREED»
Head of education program

_____ FULL NAME.
"___" _____ 20__

INDIVIDUAL JOB

By _____

(Type of practice)

Student ___ group's _____

(Name of student)

Educational program 19.04.01 "Biotechnology"

Base (place, organization) of practice

Duration of practice from _____ 20__ Y. To _____ 20__ Y

Generalized wording of the assignment	
---------------------------------------	--

Task Schedule

The name of the tasks (activities) that make up the task	Date of completion of the task (event)
1.	
2.	
3.	

Head of Practice _____

signature full name, position



МИНИСТЕРСТВО НАУКИ И ВЫСШЕГО ОБРАЗОВАНИЯ РОССИЙСКОЙ ФЕДЕРАЦИИ
Федеральное государственное автономное образовательное учреждение высшего образования

**«Дальневосточный федеральный университет»
(ДФУ)**

ШКОЛА БИОМЕДИЦИНЫ

«СОГЛАСОВАНО»

Руководитель ОП

Каленик Т.К.

(подпись)

(Ф.И.О. рук. ОП)

«12» июля 2018 г.

«УТВЕРЖДАЮ»

Директор Департамента

пищевых наук и технологий

Ю.В. Приходько

(подпись)

(Ф.И.О.)

«12» июля 2018 г.

РАБОЧАЯ ПРОГРАММА ПРОИЗВОДСТВЕННОЙ ПРАКТИКИ

**PRACTICE IN OBTAINING PROFESSIONAL SKILLS AND EXPERIENCE IN
PRODUCTION AND TECHNOLOGICAL ACTIVITIES (INCLUDING TECHNOLOGICAL
PRACTICE) / ПРАКТИКА ПО ПОЛУЧЕНИЮ ПРОФЕССИОНАЛЬНЫХ УМЕНИЙ И
ОПЫТА В ПРОИЗВОДСТВЕННО-ТЕХНОЛОГИЧЕСКОЙ ДЕЯТЕЛЬНОСТИ (В ТОМ
ЧИСЛЕ ТЕХНОЛОГИЧЕСКАЯ ПРАКТИКА)**

Направление подготовки 19.04.01 Биотехнология

Профиль подготовки Agri-Food Biotechnology

Квалификация (степень) выпускника

магистр

г. Владивосток

2018

1. REGULATORY DOCUMENTATION REGULATING THE PROCESS OF ORGANIZING AND PASSING PRACTICES

The practice program is developed in accordance with the requirements of the educational standard, independently established by FEFU, approved by order of the rector of 07.07.2015, No. 12-13-1282

2. OBJECTIVES OF DEVELOPMENT OF PRODUCTION PRACTICE

The goals of production practice (Practice in obtaining professional skills and experience in production and technological activities (including technological practice) are to consolidate the theoretical knowledge gained in the study of compulsory disciplines; acquisition of professional skills in future professional activities.

3. OBJECTIVES OF PRODUCTION PRACTICE

The objectives of production practice to obtain professional skills and experience of professional activity (including technological practice) are:

- collection of material using information and communication technologies and taking into account the basic requirements of information security for solving standard tasks of professional activity;
- Acquaintance with the basic technological equipment, technological processes and safety requirements;
- Familiarization with regulatory and technical documentation, regulations, veterinary norms and rules in the production process.

4. PLACE OF PRODUCTION PRACTICE IN THE STRUCTURE OF OP

Block B2.V.04 (P) “Practices, including Research and Development (R&D)” of the educational standard independently established by FEFU, in the direction of 04/19/01 “Biotechnology”, approved by the Ministry of Education and Science of the Russian Federation of 07.07.2015 No. 12-13-1282, is mandatory, variable and is a type of training session that is directly focused on the professional and practical training of students.

Industrial practice is the second stage of practical training at the level of higher education master's degree and is aimed at students gaining professional skills, including professional skills and professional experience.

Industrial practice is carried out in third-party organizations that have the necessary personnel and scientific and technical potential (field).

Industrial practice is based on the theoretical development of disciplines such as: The concept of scientific research in biotechnology / The concept of scientific research in biotechnology; Analytical studies of objects in biotechnology / Analytical studies of objects in biotechnology; Production activities of agro-industrial complexes / Production activities of agro-industrial complexes.

Students' internship is an integral part of the educational process and is necessary for the subsequent study of the disciplines of the professional cycle (Engineering and production organization / Engineering and production organization, Fundamentals of technology products of therapeutic and preventive nutrition / Fundamentals of technology for the production of therapeutic and preventive nutrition, etc.), as well as during other types of practice (undergraduate).

5. TYPES, METHODS, PLACE AND TIME OF PRODUCTION PRACTICE

Type of practice: practice of obtaining professional skills and experience of professional activity (including technological).

Way of carrying out - stationary / exit (at the choice of the student).

Practice time: 4 weeks in 2 semesters.

The venue of the practice is the structural units of FEFU (Department of Food Sciences and Technology), as well as organizations whose activities correspond to professional competencies mastered in the framework of the educational program 04/19/01 Biotechnology (at the student's choice).

Practice in third-party organizations is based on contracts in accordance with which students are given places of practice, as well as organizational and informational and methodological assistance is provided in the process of internship.

Students can independently offer places for practical training. The student begins the practice only after the official confirmation of the consent of the organization (enterprise) with the conclusion of the contract according to the general model established by the Federal State Autonomous Educational Institution of Higher Education “Far Eastern Federal University”.

When determining practice sites for people with disabilities and persons with disabilities, the recommendations of the medical and social examination reflected in the individual rehabilitation program for the disabled person regarding recommended working conditions and types should be taken into account. If necessary, a partner organization or a structural unit of the FEFU that accepts students belonging to the category of persons with disabilities to practice, creates special jobs for the practice in accordance with the nature of health disorders, as well as taking into account the professional type of activity and the nature of the work performed by the student's labor functions.

6. TRAINING COMPETENCIES FORMED AS A RESULT OF PERFORMANCE OF PRACTICE

Code and wording of competency	Competency Stages	
OK-5 ability to generate ideas in scientific and professional activities	Knows	research methods and innovations in scientific and professional activities
	Able to	generate ideas in scientific and professional activities
	knows	ability to generate ideas in scientific and professional activities

OPK-1 ability to professionally use modern biotechnological equipment and scientific instruments	Knows	rules and methods for the development of technological projects
	Able to	to develop technological projects as part of the team of authors
	knows	knowledge in the development of technological projects
Pc-8 the ability to conduct a feasibility study of production and the preparation of technical and economic documentation	Knows	types of technological process in food production
	Able to	apply knowledge in the design of the technological process in food production
	knows	the ability to conduct a feasibility study of production and the preparation of technical and economic documentation
PK-9 readiness to use the basic principles of organization of metrological support of production	Knows	basic principles of organizing metrological support for the production of agricultural raw materials and food products
	Able to	use the basic principles of organizing metrological support for the production of agricultural raw materials and food products
	knows	skills of using the basic principles of organizing metrological support for the production of agricultural raw materials and food products
PK-11 the ability to provide technological discipline, sanitary-hygienic mode of operation of the enterprise, the maintenance of technological equipment in proper technical condition	Knows	sanitary and hygienic operation of the enterprise, maintenance of technological equipment in proper technical condition
	Able to	provide technological discipline, sanitary and hygienic operation of the enterprise, the maintenance of technological equipment in proper technical condition
	knows	the skill of ensuring the sanitary-hygienic mode of operation of the enterprise, the maintenance of technological equipment in proper technical condition
PC - 12 with the ability to plan and carry out activities to ensure industrial safety, environmental monitoring and protection	Knows	regulatory documentation in the field of safety at a manufacturing enterprise
	Able to	to prevent violations in the field of safety at the manufacturing enterprise

	knows	safety skills in the manufacturing plant, monitoring and environmental protection
PK-13 readiness for organization, planning and management of existing biotechnological processes and production	Knows	principles of organization and planning of modern quality management systems to specific production conditions based on international standards
	Able to	organize and plan modern biotechnological processes and production
	knows	Skills of organization and management of biotechnological processes and industries
PK-14 the ability to use standard and develop new methods of engineering calculations of technological parameters and equipment of biotechnological industries	Knows	standard methods of engineering calculations of technological parameters and equipment of biotechnological industries
	Able to	use standard and develop new methods of engineering calculations of technological parameters and equipment of biotechnological industries
	knows	knowledge in the field of engineering calculations of technological parameters and equipment of biotechnological industries
PK-15 willingness to ensure the stability of production indicators and the quality of products	Knows	standards for production quality indicators
	Able to	ensure the stability of production indicators and the quality of products
	knows	the ability to ensure the stability of production indicators and the quality of products
PK-16 the ability to carry out the effective work of controls, automation and automated production management, chemical-technical, biochemical and microbiological control	Knows	operation of control, automation and automated production control, chemical-technical, biochemical and microbiological controls
	Able to	to carry out the effective work of means of control, automation and automated production management, chemical-technical, biochemical and microbiological control
	knows	knowledge of the operation of controls, automation and automated production management, chemical-technical,

		biochemical and microbiological control
PC 17 willingness to conduct pilot development of technology and process scaling	Knows	rules for pilot development of technology and process scaling
	Able to	Pilot technology development and process scaling
	knows	Knowledge in pilot development of technology and process scaling
PK-18 ability to develop and scientifically substantiate schemes for the optimal integrated certification of biotechnological products	Knows	optimal integrated certification schemes for biotechnological products
	Able to	to develop and justify schemes for optimal integrated certification of biotechnological products
	knows	the ability to develop and scientifically substantiate schemes for the optimal integrated certification of biotechnological products
PK-19 ability to analyze technological process indicators for compliance with initial scientific developments	Knows	process indicators for compliance with initial scientific developments
	Able to	analyze the performance of the technological process for compliance with the original scientific developments
	knows	ability to analyze technological process indicators for compliance with initial scientific developments

7. STRUCTURE AND CONTENT OF PRODUCTION PRACTICE

The total complexity of production practice is 6 credits, 216 hours.

№ п/ п	Sections (stages) of practice	Types of work in practice, including independent work of students and laboriousness (in hours)			Current Control Forms
1	Preparatory stage: - Obtaining documents for practice (direction, diary, assignment); - Arrival at the place of practice and an introductory briefing; - Organization of the workplace and acquaintance with the team.	Obtain ing docum ents for practic e (2 hours)	Introd uctory lecture (2 hours)	Safety briefing (2 h)	Making entries in the diary. Oral conversati ons.

2	<p>The main stage:</p> <ul style="list-style-type: none"> - Study of the organizational structure of the base of practice; - the study of regulatory and technical documentation; - Implementation of individual production tasks; - The study of practical activities. 	<p>Accomplishment of practice tasks in accordance with the program (108h)</p>	<p>Safety briefing at the enterprise (2 hours)</p>	<p>Study of materials and documents at the place of practical training (44hours)</p>	<p>Processing and analysis of the obtained practice materials (20 hours)</p>	<p>Making entries in the diary. Oral conversations.</p>
3	<p>The final stage:</p> <ul style="list-style-type: none"> - Processing and systematization of the received material; - Preparation of a report on the passage of organizational and managerial practice; - Protection of the report on organizational and management practices. 	<p>Report writing (20h)</p>	<p>Presentation preparation (14 h)</p>	<p>Report Protection (2 hours)</p>	<p>(2 hours)</p>	<p>Score with grade</p>

8. TRAINING AND METHODOLOGICAL SUPPORT OF INDEPENDENT WORK OF STUDENTS IN PRODUCTION PRACTICE

The practical training is aimed at introducing students to the material and technical support of the enterprise / workshop / laboratory, software and modern methods of analysis of raw materials.

During the practical training, regardless of the place of its passage, students should pay special attention to issues related to life safety, labor protection and industrial sanitation. For this, it is necessary to consider the principles of state and public control over the observance of labor legislation, the organization of the life safety service and its tasks.

An individual assignment (Appendix 1) is issued to the student at the university by the practice leader before the practice begins. It should be associated with the technology of obtaining one of the types of meat products.

Control questions:

1. Give the characteristic, specialization and production profile of the food enterprise.
2. Describe the material and technical base, raw material zone and capacity of the enterprise.
3. What is the mode of operation of the enterprise (how many shifts per day, month)?
4. Give the structure of the organization of the enterprise, the management scheme.
5. Describe the range of products.
6. Give a description of the production lines, describe the production scheme of the main names of products.
7. What is the role and importance of the laboratory in the enterprise?
8. What methods of analysis of raw materials, semi-finished products and finished products are carried out at the enterprise?
9. What forms of magazines are presented in the laboratory and on the production sites of the enterprise?
10. What measures are being taken on labor safety, on sanitary-hygienic, fire-preventive measures at the enterprise?
11. What activities are carried out at the enterprise to improve working conditions?
12. How is electricity, gas and water supplied to the enterprise?
13. How are finished products delivered to retail chains?
14. Measures to reduce production defects and return finished products with expired storage from retail chains.
15. What is the sales area of the enterprise?

9. FORMS OF CERTIFICATION (BY THE RESULTS OF PRACTICE)

Before undergoing practical training, the student receives an individual task from the head of practice from the university, the contents and volume of which are agreed upon with the head of the practice.

Based on the results of the practice, the student draws up a report on the passage of practice, participates in the final conference with the presentation of the results of the practice, after which she receives an offset with an assessment.

The practice report should contain the following elements:

- Title page (Appendix 3);
- Assignment and schedule of practice (Appendix 1);
- Introduction;
- Report on production activities in the process of internship;
- Sources of information;

The report is drawn up in accordance with the "Requirements for the design of written work performed by students and students of FEFU."

The volume of the report depends on the topic of the individual assignment.

Sample report structure

1. General information about the enterprise and its brief description (history, geographical location, list of main workshops, buildings and structures with an indication of their purpose; information about the main services of the enterprise).

2. The structure of the enterprise and its individual divisions, its raw material base.

3. The range of products and their characteristics. Regulatory documents for manufactured products. Design and operating capacity of the enterprise.

4. Individual task. The technological regulations for the production of one of the types of products (requirements for raw materials and finished products, formulation, methods of technochemical control, description of the main technological stages of production and methods of waste disposal).

5. Characterization of finished products (including types of packaging, storage conditions, transportation, sales, types of control of finished products).

6. Conclusion.

By agreement with the head of practice from the university and depending on the location of this type of practice, the structure of the report or its individual parts may change.

After graduation and preparation of the report in accordance with the requirements, the student submits his report to the defense of the head from the university. According to the results of the defense, a test is set with a rating (excellent, good, satisfactory, unsatisfactory

“Excellent” - the necessary practical work skills and professional competencies provided for by the practical training program are fully formed, the tasks are completed, the quality of their implementation is estimated by the number of points close to the maximum.

“Good” - the necessary practical work skills and professional competencies provided for by the practical training program are fully formed, the tasks are completed, the quality of execution of none of them is estimated by the minimum number of points, some types of tasks are completed with errors or not thoroughly enough.

“Satisfactory” - the necessary practical work skills and professional competencies are mainly formed, the gaps are not significant, some of the completed tasks contain errors.

“Unsatisfactory” - the necessary practical work skills and professional competencies provided for by the production program are not formed, all completed training tasks contain gross errors, additional independent work on

the report materials will not lead to any significant improvement in the quality of the tasks.

10. EDUCATIONAL AND METHODOLOGICAL AND INFORMATION SUPPORT OF PRODUCTION PRACTICE

a) the main:

1 Sarafanova, L.A. Nutritional Supplements: Encyclopedia - 3rd ed., Revised. and add. / L.A. Sarafanova. - St. Petersburg: Profession, 2011. -- 776 p. <http://lib.dvfu.ru:8080/lib/item?id=chamo:342063&theme=FEFU>

2 Basic principles of processing raw materials of plant, animal, microbiological origin and fish: method. directions for students special. 240902 "Food biotechnology" of all forms of education / comp. E.V. Makarova, Vladivostok: Publishing House of the Pacific Economic University, 2009. - 80 p. <http://lib.dvfu.ru:8080/lib/item?id=chamo:356130&theme=FEFU>

3 Biotechnology: a textbook for high schools / S.M. Klunova, T.A. Egorova, E.A. Zhivukhina, Moscow: Academy, 2010. -- 256 p. <http://lib.dvfu.ru:8080/lib/item?id=chamo:416005&theme=FEFU>

4 Industrial chemical-technological practice: a training manual / I.V. Chikalovets, V.V. Sova, M.I. Kusaykin [and others]; Far Eastern Federal University, School of Natural Sciences, Pacific Institute of Bioorganic Chemistry FEB RAS. - Vladivostok: Publishing House of the Far Eastern Federal University, 2011. - 31 p. <http://lib.dvfu.ru:8080/lib/item?id=chamo:416985&theme=FEFU>

5 Krasnikova L.V. Microbiological safety of food raw materials and finished products [Electronic resource]: teaching aid / Krasnikova L.V., Gunkova P.I. - The electron. text data. - St. Petersburg: ITMO University, Institute of Refrigeration and Biotechnology, 2014. - 89 c. <http://www.iprbookshop.ru/67301.html>

6 Antipova, L.V. Technology and equipment for the production of sausages and semi-finished products [Electronic resource]: study guide / L.V.

Antipova, I.N. Tolpygina, A.A. Kalachev. - The electron. Dan. - St. Petersburg: GIORD, 2012. -- 600 p. <https://e.lanbook.com/book/4880>

7 Smirnov, A.V. Cutting meat in Russia and the countries of the European Union [Electronic resource]: reference book / A.V. Smirnov, G.V. Kulyakov, N.N. Kalishina. - The electron. Dan. - St. Petersburg: GIORD, 2014. -- 136 p. <https://e.lanbook.com/book/69868>

8. Food biotechnology of products from raw materials of plant origin: a textbook / O.A. Neverova, G.A. Gorelikova, V.M. Poznyakovsky. - Saratov: Publishing House "University Education", 2014. - 415 p. <http://www.iprbookshop.ru/4160.html>

9 Vedishev S.M. The mechanization of primary processing and processing of milk [Electronic resource]: a training manual / Vedishev SM, Milovanov AV - Electron. textual data. — Tambov: Tambov State Technical University, EBS DIA, 2012.— 152 p. <http://www.iprbookshop.ru/64115.html>

10 Magazine "Fat-and-Oil Industry" (Publishing House LLC "Food Industry"; RSCI) <http://www.foodprom.ru/archive>

b) additional:

1 Auerman, L.Ya. Technology of baking production: Textbook / L.Ya. Auerman. - 9th ed., Revised. and add. / Under the total. ed. L.I. Puchkova. - St. Petersburg: Profession, 2009. -- 416 p. <http://lib.dvfu.ru:8080/lib/item?id=chamo:316025&theme=FEFU>

2 Borisenko, L.A. Biotechnological basis for the intensification of production of salted meat products / A.A. Borisenko, A.A. Bratsikhin. - M.: DeLi print, 2010. -- 163 p. <http://lib.dvfu.ru:8080/lib/item?id=chamo:342770&theme=FEFU>

3 Ivashov, V.I. Technological equipment for meat industry enterprises: a textbook for high schools / V.I. Ivashov. - St. Petersburg.: GIORD, 2010. - 736 pp. [Http://lib.dvfu.ru:8080/lib/item?id=chamo:59114&theme=FEFU](http://lib.dvfu.ru:8080/lib/item?id=chamo:59114&theme=FEFU)

4 Rogov, I.A. General technology of meat and meat products / I.A. Rogov, A.G. Zabashta, G.P. Kazyulin. - M.: KolosS, 2010. -- 367 p.
<http://lib.dvfu.ru:8080/lib/item?id=chamo{40686&theme=FEFU>

The list of resources of the information and telecommunication network "Internet".

1. <http://elibrary.ru> Scientific Electronic Library eLIBRARY.RU
2. The electronic library system "Doe" <http://e.lanbook.com/>
3. The electronic library system "IPRBOOK" <http://www.iprbookshop.ru>
4. Scopus database: <http://www.scopus.com/home.url>
5. Web of Science database <http://apps.webofknowledge.com/>
6. Database of full-texting academic journals in China
<http://oversea.cnki.net/>
7. The electronic library of dissertations of the Russian State Library
<http://diss.rsl.ru/>
8. EBSCO Electronic Databases <http://search.ebscohost.com/>

11. MATERIAL AND TECHNICAL SUPPORT OF PRODUCTION PRACTICE

The practice bases may be workshops and laboratories of industrial enterprises of food and processing profile (meat processing enterprises) equipped with modern technological equipment and testing instruments that allow controlling the quality of raw materials and manufactured products, laboratories for analyzing and evaluating the quality of food products.

Approximate practice bases: Vladkhleb OJSC bread production enterprise; enterprises for the production of milk and dairy products: LLC Artyomovsky Dairy Plant, LLC Arsenyevsky Dairy Plant, LLC HAPK Green Agro; enterprises for the production of meat and sausages: LLC Elephant, LLC Nikolsk, LLC Ratimir; enterprise for the production of confectionery: OJSC "Primorsky Confectioner" and other research organizations, enterprises of food and processing industries.

№ п/п	Name of special rooms and premises for independent work	Equipped with special rooms and rooms for independent work
3	<p>690022, Primorsky Territory, Vladivostok, Russky Island, Saperny Peninsula, village of Ajax 10, auditorium M 311.</p> <p>M311- The classroom for lecture-type classes, seminar-type classes, group and individual consultations, ongoing monitoring and interim certification.</p>	<p>Training furniture for 25 workplaces, teacher's place (table, chair), Analytical and technological equipment (M311): Milk centrifuge with heating IJIM 1-12; Liquid thermostat LOIP Lt-208a, volume 8l, 120x150 / 200mm; Analyzer of milk quality Lactan 1-4 mod. 230; PH-millivoltmeter with tripod pH-150MI; VSP 1.5-2-3T scales; Refrigerator "Ocean-RFD-325B"; Drying cabinet, stainless steel chamber. steel, 58l; electric stove 111CH 101-226589; PE-6110 magnetic stirrer with heating; VNZh-0,3-KhS3 viscometer (d-1.41) glass capillary; Tripod PE-2710 lab. for burettes.</p> <p>Multimedia equipment: Monoblock Lenovo C360G-i34164G500UDK; Screen with electric 236 * 147 cm Trim Screen Line; DLP projector, 3000 ANSI Lm, WXGA 1280x800, 2000: 1 EW330U Mitsubishi; Subsystem of specialized hardware mounts CORSA-2007 Tuarex; Video Switching Subsystem: DVI DXP 44 DVI Pro Extron matrix switcher; Extender DVI over twisted pair DVI 201 Tx / Rx; Subsystem of audio switching and sound reinforcement; ceiling mount speaker SI 3CT LP Extron; Sennheiser EW 122 G3 UHF Microphone Lavalier Radio System with a wireless microphone and receiver; DMP 44 LC Extron digital audio processor; Extron IPL T S4 Network Management Controller; Wireless LANs for students are provided with a system based on 802.11a / b / g / n 2x2 MIMO (2SS) access points.</p>
4	<p>690022, Primorsky Territory, Vladivostok, Russky Island, Saperny Peninsula, village of Ajax 10, auditorium M621.</p>	<p>Training furniture for 17 workplaces, Teacher's place (table, chair), Computer class: Monoblock Lenovo C360G-i34164G500UDK 19.5 "Intel Core i3-4160T 4GB</p>

	M621- The classroom for the implementation of design work, lecture-type classes, seminar-type classes, group and individual consultations, ongoing monitoring and interim certification.	DDR3-1600 SODIMM (1x4GB) 500GB Windows Seven Enterprise - 17 pcs; Wired LAN - Cisco 800 series; Wireless LAN for students is provided with a system based on 802.11a / b / g / n 2x2 MIMO (2SS) access points.
6	690922, Primorsky Territory, Vladivostok, Russky Island, Saperny Peninsula, village of Ajax, 10, building A, aud. A1017. Reading rooms of the FEFU Scientific Library with open access to the fund (building A - level 10) Audience for independent work of graduate students.	The room is equipped with specialized training furniture (seats - 15) Equipment: Monoblock Lenovo C360G-i34164G500UDK - 15 pcs. Integrated Polymedia FlipBox Touchscreen Display - 1 pc. Copier-printer-color scanner in e-mail with 4 trays Xerox WorkCentre 5330 (WC5330C - 1 pc.

In order to ensure special conditions for the training of disabled and disabled people in FEFU, all buildings are equipped with ramps, elevators, lifts, specialized places, equipped with toilets, information and navigation support signs.

For people with disabilities and people with disabilities, the choice of practice places is consistent with the requirement of their accessibility for these students and the practice is conducted taking into account the peculiarities of their psychophysical development, individual capabilities and health status.

Compiled by (s):

Professor of the Department of Food Sciences and Technology, Doctor of Biological Sciences, Professor Kalenik T.K.

Associate professor, Department of Food Sciences and Technology, T. Senotrusova

The practice program was discussed at a meeting of the Department of Food Sciences and Technology, protocol No. 1 dated July 11, 2018.



MINISTRY OF EDUCATION AND SCIENCE OF THE RUSSIAN
FEDERATION

Federal state autonomous educational institution
of higher education

«Far Eastern Federal University»
(FEFU)

SCHOOL OF BIOMEDICINE

«AGREED»
Head of education program

_____ FULL NAME.
"___" _____ 20__

INDIVIDUAL JOB

By _____

(Type of practice)

Student ___ group's _____

(Name of student)

Educational program 19.04.01 "Biotechnology"

Base (place, organization) of practice

Duration of practice from _____ 20__ Y. To _____ 20__ Y

Generalized wording of the assignment	
---------------------------------------	--

Task Schedule

The name of the tasks (activities) that make up the task	Date of completion of the task (event)
1.	
2.	
3.	

Head of Practice _____

signature full name, position

Practice Diary Example
Far Eastern Federal University
School of Biomedicine

Head of Practice from FEFU

Head of practice from the host organization

A DIARY

By _____ practice

Student _____ course _____ group

By program _____

Place of Practice _____

Duration of practice _____ weeks

1. Student calendar

№ п\п	Name of work	Calendar dates		Surname of head of practice
		start	ending	

2. Student work diary

date of	Summary of work intern	Signature a manager

3. Report protection results

The report is protected by _____ 20__

With a rating of _____

Director of DPNiT _____ Full name

Practice report title page form



MINISTRY OF EDUCATION AND SCIENCE OF THE RUSSIAN
FEDERATION

Federal state autonomous educational institution
of higher education

«Far Eastern Federal University»
(FEFU)

SCHOOL OF BIOMEDICINE

The report is protected with a rating of _____
" _____ " _____ 20__ Y

Director of DPNiT
_____ Surname I.O.

REPORT

on the passage of industrial and technological practice in

(Full name of the enterprise)

Student gr. _____ groups _____ (_____)
Signature full name

Supervisor
from the university _____ (_____)
Signature full name

MINISTRY OF EDUCATION AND SCIENCE OF THE RUSSIAN
FEDERATION
Federal state autonomous educational institution
of higher education
«Far Eastern Federal University»
(FEFU)

SCHOOL OF BIOMEDICINE

N A P R A V L E N I E

To practice _____

Student of the master course

_____ Last name First name _____ group
(Full Name)

Seconded to _____

Name of base organization

Address _____

Order on referral to practical training No. _____

For passing _____

In the direction of preparation 19.04.01 Biotechnology for a period from _____

201 to _____ 201 (continuous / discrete)

Head of Practice

Professional skills and experience in

Professional activity

M.P. _____

(Position, academic title) (Signature) (Full name)

Marks on the implementation and terms of practice

Company name	Arrival and Departure Mark	Signature, decryption of signature, stamp
Name of enterprise, organization in accordance with the contract	<i>Arrived</i> __.__.20__ г.	
	<i>Arrived</i> __.__.20__ г.	

Head of Practice _____

signature full name, position



МИНИСТЕРСТВО НАУКИ И ВЫСШЕГО ОБРАЗОВАНИЯ РОССИЙСКОЙ ФЕДЕРАЦИИ
Федеральное государственное автономное образовательное учреждение высшего образования
«Дальневосточный федеральный университет»
(ДФУ)
ШКОЛА БИОМЕДИЦИНЫ

«СОГЛАСОВАНО»

Руководитель ОП

 Каленик Т.К.

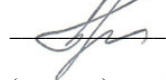
(подпись) (Ф.И.О. рук. ОП)

«12» июля 2018 г.

«УТВЕРЖДАЮ»

Директор Департамента

пищевых наук и технологий

 Ю.В. Приходько

(подпись) (Ф.И.О.)

«12» июля 2018 г.

**РАБОЧАЯ ПРОГРАММА ПРОИЗВОДСТВЕННОЙ
ПРАКТИКИ**

**PRACTICE IN OBTAINING PROFESSIONAL SKILLS AND EXPERIENCE IN
ORGANIZATIONAL AND MANAGEMENT ACTIVITIES / ПРАКТИКА ПО
ПОЛУЧЕНИЮ ПРОФЕССИОНАЛЬНЫХ УМЕНИЙ И ОПЫТА В
ОРГАНИЗАЦИОННО-УПРАВЛЕНЧЕСКОЙ ДЕЯТЕЛЬНОСТИ**

Направление подготовки 19.04.01 Биотехнология

Профиль подготовки Agri-Food Biotechnology

Квалификация (степень) выпускника

магистр

г. Владивосток
2018

1. REGULATORY DOCUMENTATION REGULATING THE PROCESS OF ORGANIZING AND PASSING PRACTICES

The program is developed in accordance with the requirements of the educational standard of higher education, independently established by FEFU 19.04.01 Biotechnology from 07/07/2015 No. 12-13-1282.

2. OBJECTIVES OF DEVELOPMENT OF PRODUCTION ORGANIZATIONAL AND MANAGEMENT PRACTICE

The purpose of the practice of obtaining professional skills and experience in organizational and managerial activities is to teach graduate students management skills; collection, analysis and use of information for management decisions.

The practice of gaining professional skills and experience in organizational and managerial activities (hereinafter referred to as production practice / organizational and managerial practice) lasting 2 weeks is provided after theoretical training in the second year and involves consolidating the knowledge and skills acquired by students as a result of mastering theoretical courses, developing practical skills and contributes to the integrated formation of general cultural and professional competencies of students.

3. OBJECTIVES OF ORGANIZATIONAL AND MANAGEMENT PRACTICE

The objectives of the practice of obtaining professional skills and experience of professional activity (organizational and managerial) are:

- the organization of the work of the team of performers, the adoption of executive decisions in a spectrum of opinions, the determination of the order of work;

- search for optimal solutions when creating new products, taking into account the requirements of the science of nutrition, quality and cost, safety and environmental friendliness.

- organization in the division of work on the development and improvement of food technology of functional and specialized nutrition;

- organization of work on the prevention of occupational injuries, occupational diseases, prevention of environmental violations;

- preparation of applications for inventions and paperwork;

- development of quality management systems for the technology of production of food products from plant materials based on international quality systems.

4. PLACE OF PRODUCTION PRACTICE IN THE STRUCTURE OF OP

Organizational and managerial practice lasting 4 weeks is provided after theoretical training in the second year and involves consolidating the knowledge and skills acquired by students as a result of mastering theoretical courses, develops practical skills and contributes to the integrated formation of general cultural and professional competencies of students.

In accordance with the plan of the educational process, organizational and managerial practice is carried out in 3 semesters, which is 3 credits or 108 hours.

The organizational and management practice of undergraduates is carried out taking into account the scientific interests of undergraduates

and provides for classes in subjects and disciplines corresponding to the research interests of undergraduates.

Organizational and managerial practice is based on the development of training courses in the disciplines of the basic part:

- Administration and management of agriculture and agribusiness.
- Research methods in biotechnology.

Organizational and managerial practice is based on the development of training courses in the disciplines of the professional cycle: The concept of scientific research in biotechnology / The concept of scientific research in biotechnology; Analytical studies of objects in biotechnology / Analytical studies of objects in biotechnology.

Organizational and managerial practice is based on the development of the practical part of the training course: Practice in obtaining primary professional skills / Practice for obtaining primary professional skills; Practice in obtaining professional skills and experience in production and technological activities (including technological practice) / The practice of obtaining professional skills and experience in industrial and technological activities (including technological practice).

The knowledge and skills acquired and enshrined in the framework of organizational and managerial practice, allow to achieve the required level of mastering the master's training program. Also, during the passage of organizational and managerial practice, the undergraduate forms and develops his practical skills, abilities, universal and professional competencies.

In the process of organizational and managerial practice, theoretical knowledge is used to solve specific practical problems, providing a combination of theoretical training with practical activities in enterprises.

In the process of organizational and managerial practice, undergraduates should get an idea of the real work of masters as performers or junior level managers in various services of the management apparatus; the formation of the organizational and managerial structure of organizations; organization of work of performers (teams of performers) in the development and improvement of food technology of functional and specialized nutrition; collection, processing and analysis of information on factors of the external and internal environment of the organization for the organization of work on the prevention of occupational injuries, occupational diseases, the prevention of environmental violations; evaluation of the effectiveness of projects; preparation of applications for inventions and paperwork based on the results of information and analytical activities; assessment of the effectiveness of quality systems.

5. TYPES, METHODS, PLACE AND TIME OF PRODUCTION PRACTICE

Type of practice: The practice of obtaining professional skills and experience of professional activity (organizational and managerial) of students in the field of study 04.19.01 Biotechnology is organized dispersed in the 3rd semester of the curriculum.

Way of carrying out - stationary / exit (at the choice of the student).

Place of practice:

The place of practice is the structural units of FEFU (Department of Food Sciences and Technology), as well as organizations whose activities correspond to professional competencies mastered in the framework of the educational program 19.04.01 Biotechnology.

Practice in third-party organizations is based on contracts in accordance with which students are given places of practice, as well as organizational and informational and methodological assistance is provided in the process of internship.

Students can independently offer places for practical training. The student begins the practice only after the official confirmation of the consent of the organization (enterprise) with the conclusion of the contract according to the general model established by the Federal State Autonomous Educational Institution of Higher Education “Far Eastern Federal University”.

In the course of practice, undergraduates perform organizational and managerial activities:

- study of documents of normative support of educational activities of FEFU. In the process of working with regulatory documents, the undergraduate must study the structure and content of the OS in the direction and highlight the requirements for the professional preparedness of the bachelor and / or master; analyze the curriculum for the preparation of the bachelor (specialist) and the work program of the provided course;

- familiarization with the place of practice in order to study the management system, scale and legal form of the enterprise;

- the study of the state and prospects of development of production and economic and financial activities; to study the main technical and economic indicators of the organization in recent years;

- analysis of the personnel of the enterprise or structural unit of the enterprise;

- drawing up schemes reflecting the production and organizational structure of the enterprise;

- study of the composition and content of the functions performed by a particular structural unit of the enterprise, identify mechanisms of

interaction with other units, formulate proposals for improving the production activities of the enterprise / structural unit.

The internship is possible on the basis of educational institutions, enterprises of all forms of ownership, offered by the undergraduate in the order of his personal initiative, in agreement with the graduating department (Department).

The object of study are:

- documents of normative support of educational activities of FEFU. In the process of working with regulatory documents, the undergraduate must study the structure and content of the FSES HPE in the direction and highlight the requirements for professional training of the bachelor and / or master; analyze the curriculum for the preparation of the bachelor (specialist) and the work program of the provided course;

- personnel of the enterprise or structural unit of the enterprise;

- enterprise management system;

- the composition and content of the actually performed functions of a certain structural unit of the enterprise, to identify mechanisms of interaction with other units, to formulate proposals for improving the production activities of the enterprise / structural unit;

- Quality management system of food production technology based on international quality systems;

- Other forms of work determined by the supervisor.

The specific content of all types of organizational and managerial activities is reflected in the individual plan of organizational and managerial practice of the undergraduate, compiled by the undergraduate in accordance with the assignment of the head of practice.

In accordance with his individual plan, the undergraduate must participate in all types of organizational and managerial work of the department department of the School or enterprise.

The results of the work are recorded in the diary of organizational and management practice.

6. TRAINING COMPETENCIES FORMED AS A RESULT OF PERFORMANCE OF PRACTICE

Code and wording of competency	Competency Stages	
PK-7 readiness for organizing the work of the team of performers, making executive decisions in a spectrum of opinions, determining the order of work	Knows	tasks of professional activity, technological processes of food production, ways of organizing the work of the team
	Able to	apply knowledge of the manufacturing process to organize work
	knows	experience in the practical application of knowledge of the technological process of food production
PK-8 with the ability to conduct a feasibility study of production and the preparation of technical and economic documentation	Knows	normative and technical documentation, regulations, veterinary norms and rules, basic principles for the preparation of technical and economic documentation experience in the practical application of
	Able to	apply knowledge about the technological process of production for the organization of work, conduct a feasibility study of production
	knows	knowledge of the technical and economic analysis of production
PK-9 readiness to use the basic principles of organization of metrological support of production	Knows	normative and technical documentation, regulations, veterinary norms and rules
	Able to	rational use of normative and technical documentation, regulations, veterinary norms and rules in the field of organization of metrological support for the production of agricultural raw materials and food products
	knows	the skills of using normative and technical documentation, regulations, veterinary norms and rules in the field of metrological support for the production of agricultural raw materials and food products

PK-10 with the ability to develop a quality management system for biotechnological products in accordance with the requirements of Russian and international quality standards	Knows	normative and technical documentation, regulations, veterinary norms and rules
	Able to	put into practice theoretical knowledge in the field of compliance with the requirements of a biotechnological product
	knows	quality management system at an enterprise development and compliance skills
PK-11 with the ability to provide technological discipline, sanitary-hygienic operation of the enterprise, the maintenance of technological equipment in proper technical condition	Knows	ways to search for scientific and technical information of domestic and foreign experience on the topic of research of a biotechnological product quality management system
	Able to	to search for scientific and technical information of domestic and foreign experience on the subject of research
	knows	ways to search for scientific and technical information of domestic and foreign experience on the research topic
PK-12 with the ability to plan and carry out activities to ensure industrial safety, environmental monitoring and protection	Knows	basics of industrial safety, regulatory and technical documentation, regulations, veterinary norms and rules
	Able to	put knowledge into practice in the field of industrial safety, monitoring and environmental protection
	knows	ways to ensure industrial safety, monitoring and environmental protection

7. STRUCTURE AND CONTENT OF PRODUCTION PRACTICE

The total complexity of production practice is 3 credits, 108 hours.

№ П/ П	Sections (stages) of practice	Types of work in practice, including independent work of students and laboriousness (in hours)			Current Control Forms
		Obtain ing docum ents for practic e (2	Introd uctory lecture (2 hours)	Safety briefing (2 h)	
1	Preparatory stage: - Obtaining documents for practice (direction, diary, assignment); - Arrival at the place of practice and an	e (2	hours)		Making entries in the diary. Oral

	introductory briefing; -Organization of the workplace and acquaintance with the team.	hours)				conversations.
2	The main stage: - Study of the organizational structure of the base of practice; - the study of regulatory and technical documentation; - Implementation of individual production tasks; - The study of practical activities.	Accomplishment of practice tasks in accordance with the program (30 h)	Safety briefing at the enterprise (2 hours)	Study of materials and documents at the place of practical training (26 hours)	Processing and analysis of the obtained practice materials (20 hours)	Making entries in the diary. Oral conversations.
3	The final stage: - Processing and systematization of the received material; - Preparation of a report on the passage of organizational and managerial practice; - Protection of the report on organizational and management practices.	Report writing (11h)	Presentation preparation (9 h)	Report Protection (2 hours)		Score with grade

In the process of practice, undergraduates participate in all types of organizational and managerial work of the department, departments of the university or enterprise. In the course of practice, undergraduates carry out organizational and managerial activities.

The specific content of organizational and managerial activities is reflected in the individual calendar plan of the organizational and managerial practice of the undergraduate.

8. TRAINING AND METHODOLOGICAL SUPPORT OF INDEPENDENT WORK OF TRAINERS IN PRODUCTION PRACTICE

The program of practice includes preparatory, main, final stages.

1 Preparatory phase.

1.1 Preparation of an individual plan for the implementation of the program of practice, in accordance with the task of the head of practice.

1.2 Acquaintance with the information and methodological basis of practice.

1.3 The Definition of the discipline and its module, which will be conducted training sessions, didactic materials prepared.

2 The main stage.

2.1 The Study of the state and prospects of development of production and economic and financial activities; The main technical and economic indicators of the organization in recent years.

2.2 The Study of the personnel of the enterprise or structural unit of the enterprise. The study of schemes reflecting the production and organizational structure of the enterprise.

2.3 The Study of the composition and content of the actually performed functions of a particular structural unit of the enterprise, to identify mechanisms of interaction with other units, to formulate proposals for improving the production activities of the enterprise / structural unit.

2.4. Study of the organization of work on the prevention of occupational injuries, occupational diseases, and the prevention of environmental violations at the enterprise.

3 Final stage

3.1 Preparation of a practice report.

3.2 Report protection.

The result of the internship is the preparation of a report in which a qualified analysis of a particular problem is presented, a program is developed and tools for solving the problem are proposed, conclusions are made about the possibility of practical use (implementation) of the results. All this can form the basis of the master's report on practice. The results of the analysis are made out in writing.

The report on the results of organizational and managerial practice includes a description of the work done.

The report on organizational and management practice includes:

1. The characteristic compiled by the head of practice from the enterprise.

2. Report on the passage of organizational and managerial practice, drawn up in accordance with established requirements. The report on the practice should reflect all types of work performed in accordance with the assignment and an individual plan of organizational and managerial practice.

The report contains:

1. An individual plan of organizational and managerial practice together with an individual task for practice.

2. Diary of organizational and managerial practice.

3. Report made by structure:

- Introduction, which indicates the purpose, place, start date and duration of the practice, a list of work and tasks completed during the practice;

- The main part, containing an analysis of organizational and managerial literature on the topic, a description of the practical tasks that the graduate student solves during the internship, a description of the

organization of individual work, the results of the analysis of the classes by teachers and undergraduates;

-Conclusion, including: a description of skills acquired in practice, suggestions for improving organizational and managerial work, individual conclusions about the practical significance of the organizational and managerial research.

-List of sources used.

-Applications.

For full-time undergraduates, various options for passing organizational and managerial practice are possible.

9. FORMS OF CERTIFICATION (BY THE RESULTS OF PRACTICE)

Before undergoing organizational and managerial practice, the undergraduate receives an individual task from the head of practice from the university, the contents and volume of which are agreed upon with the head of the practice.

Based on the results of the practice, the student draws up a report on the passage of practice, participates in the final conference with the presentation of the results of the practice, after which she receives an offset with an assessment.

The practice report should contain the following elements:

- title page (Appendix 3);
- assignment and schedule of practice (Appendix 1);
- introduction;
- report on production activities in the process of internship;
- sources of information;

The report is drawn up in accordance with the "Requirements for the design of written work performed by students and students of FEFU."

The volume of the report depends on the topic of the individual assignment.

Sample report structure

1. General information about the enterprise and its brief description (history, geographical location, list of main workshops, buildings and structures with an indication of their purpose; information about the main services of the enterprise).

2. The structure of the enterprise and its individual divisions, its raw material base.

3. The state and prospects of development of production and economic and financial activities; The main technical and economic indicators of the organization in recent years.

4. The staff of the enterprise or structural unit of the enterprise. Schemes reflecting the production and organizational structure of the enterprise.

5. The composition and content of the actually performed functions of a certain structural unit of the enterprise, to identify mechanisms of interaction with other units, to formulate proposals for improving the production activities of the enterprise / structural unit.

6. Organization of work on the prevention of occupational injuries, occupational diseases, and the prevention of environmental violations at the enterprise.

7. Conclusion.

By agreement with the head of practice from the university and depending on the location of this type of practice, the structure of the report or its individual parts may change.

After graduation and preparation of the report in accordance with the requirements, the student submits his report to the defense of the head from the university. According to the results of the defense, a test is set with a rating (excellent, good, satisfactory, unsatisfactory):

“Excellent” - the necessary practical work skills and professional competencies provided for by the organizational and managerial practice program are fully formed, tasks are completed, the quality of their implementation is estimated by the number of points close to the maximum.

“Good” - the necessary practical work skills and professional competencies provided for in the organizational and managerial practice program are fully formed, the tasks are completed, the quality of execution of none of them is estimated by the minimum number of points, some types of tasks are completed with errors or insufficiently thoroughly.

“Satisfactory” - the necessary practical work skills and professional competencies are mainly formed, the gaps are not significant, some of the completed tasks contain errors.

“Poor” - the necessary practical work skills and professional competencies provided for by the organizational and management practice program are not formed, all completed training tasks contain gross errors, additional independent work on the report materials will not lead to any significant improvement in the quality of the tasks.

10. EDUCATIONAL AND METHODOLOGICAL AND INFORMATION SUPPORT OF PRODUCTION PRACTICE

Main literature:

1. Rational processing of raw materials in the production of meat products: a textbook for universities / T.K. Kalenik, OV Tabakaeva, V.A.

Lyakh [et al.]; Far Eastern Federal University, School of Biomedicine. - Vladivostok: FEFU Publishing House, 2013 .-- 189 p. <http://elib.dvfu.ru/vital/access/manager/Repository/vtls:000841970>

2. Planning and organization of production: a training manual / A.M. Akchurina. - Moscow: Rusyns, 2018 .-- 176 p. - ISBN 978-5-4365-2524-2. <https://www.book.ru/book/929633>

3. Kondratyev E.I. Technology and organization of production [Electronic resource]: study guide / Kondratyev EI— Electron. textual data. — Kazan: Kazan National Research Technological University, 2013. — 168 p. <http://www.iprbookshop.ru/62312.html>

4. Sysoev L.V. Organization of production at industrial enterprises [Electronic resource]: lecture notes / Sysoev L.V. - Electron. textual data. — M.: Moscow State Academy of Water Transport, 2011.— 119 p. <http://www.iprbookshop.ru/46295.html>

5. Kilina, I.A. Communicative technologies in the food industry [Electronic resource]: teaching aid / I.A. Kilina, T.V. Nettle, L.A. Mayurnikova. - The electron. Dan. - Kemerovo: KemSU, 2016 .-- 146 p. <https://e.lanbook.com/book/93551>

6. Menh, L.V. Economics and enterprise organization [Electronic resource]: study guide / L.V. Mench, E.E. Romyantseva, I.K. Kuprina. - The electron. Dan. - Kemerovo: KemSU, 2016 .-- 156 p. <https://e.lanbook.com/book/99561>

7. Economics and organization of the enterprise: workshop [Electronic resource] / L.V. Mench [et al.]. - The electron. Dan. - Kemerovo: KemSU, 2016 .-- 116 p. <https://e.lanbook.com/book/99573>

8. Organization of production at food industry enterprises [Electronic resource]: study guide / Yu.A. Salikov [et al.]. - The electron. Dan. - Voronezh: VGUIT, 2010. <https://e.lanbook.com/book/5832>

Additional literature:

1 Auerman, L.Ya. Technology of baking production: Textbook / L.Ya. Auerman. - 9th ed., Revised. and add. / Under the total. ed. L.I. Puchkova. - St. Petersburg: Profession, 2009 .-- 416 p. <http://lib.dvfu.ru:8080/lib/item?id=chamo:316025&theme=FEFU>

2 Borisenko, L.A. Biotechnological basis for the intensification of production of salted meat products / A.A. Borisenko, A.A. Bratsikhin. - M.: DeLi print, 2010 .-- 163 p. <http://lib.dvfu.ru:8080/lib/item?id=chamo:342770&theme=FEFU>

3 Ivashov, V.I. Technological equipment for meat industry enterprises: a textbook for high schools / V.I. Ivashov. - St. Petersburg.: GIORD, 2010. - 736 pp. [Http://lib.dvfu.ru:8080/lib/item?id=chamo:59114&theme=FEFU](http://lib.dvfu.ru:8080/lib/item?id=chamo:59114&theme=FEFU)

4 Rogov, I.A. General technology of meat and meat products / I.A. Rogov, A.G. Zabashta, G.P. Kazyulin. - M.: KolosS, 2010 .-- 367 p. <http://lib.dvfu.ru:8080/lib/item?id=chamo:40686&theme=FEFU>

5 Krus, G.N. Technology of milk dairy products: Textbook / G.N. Krus, A.G. Khramtsov, 3.V. Volokitina, S.V. Karpychev; Ed. A.M. Shalyginoy. - M.: KolosS, 2006 .-- 455 p. <http://lib.dvfu.ru:8080/lib/item?id=chamo:351156&theme=FEFU>

The list of resources of the information and telecommunication network "Internet".

1. <http://elibrary.ru> Scientific Electronic Library eLIBRARY.RU
2. The electronic library system "Doe" <http://e.lanbook.com/>
3. The electronic library system "IPRBOOK" <http://www.iprbookshop.ru>
4. Scopus database: [//www.scopus.com/home.url](http://www.scopus.com/home.url)
5. Web of Science database <http://apps.webofknowledge.com/>
6. Database of full-texting academic journals in China <http://oversea.cnki.net/>

7. The electronic library of dissertations of the Russian State Library <http://diss.rsl.ru/>

8. EBSCO Electronic Databases <http://search.ebscohost.com/>

11. MATERIAL AND TECHNICAL SUPPORT OF PRODUCTION PRACTICE

Bases of practice can be educational institutions; research institutes, laboratories; workshops and laboratories of industrial enterprises of food and processing profile (for example, meat processing enterprises), equipped with modern technological equipment and testing instruments, allowing to control the quality of raw materials and products; laboratories for the analysis and assessment of the quality of food products, as well as the scientific laboratory of ecobiotechnology of the FEFU School of Biomedicine and the Department of Biotechnology and Functional Nutrition, where there are conditions for passing organizational and managerial practice.

Approximate practice bases: Federal State Budgetary Scientific Institution Scientific Center for Agrobiotechnologies of the Far East named after A.K. Seagulls”, LLC“ Ratimir ”, PPO“ Nikolsk ”, SGB“ Management ”(Artyomovsky Gormolokozavod,“ Green-Agro ”), LLC“ Brothers Group ”, LLC“ VIK ”, LLC“ AgroMersi Trade ”, OJSC“ Vladkhleb ”, and etc.

The material and technical support for the implementation of organizational and managerial practice on the basis of the Department of Food Sciences and Technologies includes lecture halls and practical classes equipped with multimedia equipment and that comply with sanitary and opposite rules and norms.

№ п/п	Name of special rooms and premises for independent work	Equipped with special rooms and rooms for independent work
3	<p>690022, Primorsky Territory, Vladivostok, Russky Island, Saperny Peninsula, village of Ajax 10, auditorium M 311.</p> <p>M311- The classroom for lecture-type classes, seminar-type classes, group and individual consultations, ongoing monitoring and interim certification.</p>	<p>Training furniture for 25 workplaces, teacher's place (table, chair),</p> <p>Analytical and technological equipment (M311): Milk centrifuge with heating IJIM 1-12; Liquid thermostat LOIP Lt-208a, volume 8l, 120x150 / 200mm; Analyzer of milk quality Lactan 1-4 mod. 230; PH-millivoltmeter with tripod pH-150MI; VSP 1.5-2-3T scales; Refrigerator "Ocean-RFD-325B"; Drying cabinet, stainless steel chamber. steel, 58l; electric stove 111CH 101-226589; PE-6110 magnetic stirrer with heating; VNZh-0,3-KhS3 viscometer (d-1.41) glass capillary; Tripod PE-2710 lab. for burettes.</p> <p>Multimedia equipment: Monoblock Lenovo C360G-i34164G500UDK; Screen with electric 236 * 147 cm Trim Screen Line; DLP projector, 3000 ANSI Lm, WXGA 1280x800, 2000: 1 EW330U Mitsubishi; Subsystem of specialized hardware mounts CORSA-2007 Tuarex; Video Switching Subsystem: DVI DXP 44 DVI Pro Extron matrix switcher; Extender DVI over twisted pair DVI 201 Tx / Rx; Subsystem of audio switching and sound reinforcement; ceiling mount speaker SI 3CT LP Extron; Sennheiser EW 122 G3 UHF Microphone Lavalier Radio System with a wireless microphone and receiver; DMP 44 LC Extron digital audio processor; Extron IPL T S4 Network Management Controller; Wireless LANs for students are provided with a system based on 802.11a / b / g / n 2x2 MIMO (2SS) access points.</p>
4	690022, Primorsky Territory,	Training furniture for 17

	Vladivostok, Russky Island, Saperny Peninsula, village of Ajax 10, auditorium M621. M621- The classroom for the implementation of design work, lecture-type classes, seminar-type classes, group and individual consultations, ongoing monitoring and interim certification.	workplaces, Teacher's place (table, chair), Computer class: Monoblock Lenovo C360G-i34164G500UDK 19.5 "Intel Core i3-4160T 4GB DDR3-1600 SODIMM (1x4GB) 500GB Windows Seven Enterprise - 17 pcs; Wired LAN - Cisco 800 series; Wireless LAN for students is provided with a system based on 802.11a / b / g / n 2x2 MIMO (2SS) access points.
6	690922, Primorsky Territory, Vladivostok, Russky Island, Saperny Peninsula, village of Ajax, 10, building A, aud. A1017. Reading rooms of the FEFU Scientific Library with open access to the fund (building A - level 10) Audience for independent work of graduate students.	The room is equipped with specialized training furniture (seats - 15) Equipment: Monoblock Lenovo C360G-i34164G500UDK - 15 pcs. Integrated Polymedia FlipBox Touchscreen Display - 1 pc. Copier-printer-color scanner in e-mail with 4 trays Xerox WorkCentre 5330 (WC5330C - 1 pc.

In order to ensure special conditions for the training of disabled and disabled people in FEFU, all buildings are equipped with ramps, elevators, lifts, specialized places, equipped with toilets, information and navigation support signs.

For people with disabilities and people with disabilities, the choice of practice places is consistent with the requirement of their accessibility for these students and the practice is conducted taking into account the peculiarities of their psychophysical development, individual capabilities and health status.

Compiled by (s):

Professor of the Department of Food Sciences and Technology,
Doctor of Biological Sciences, Professor Kalenik T.K.

Associate professor, Department of Food Sciences and
Technology, T. Senotrusova

The practice program was discussed at a meeting of the Department of Food Sciences and Technology protocol No. 1 dated July 11, 2018.



MINISTRY OF EDUCATION AND SCIENCE OF THE RUSSIAN
FEDERATION

Federal state autonomous educational institution
of higher education

«Far Eastern Federal University»
(FEFU)

SCHOOL OF BIOMEDICINE

«AGREED»

Head of education program

_____ FULL NAME.

"__" "_____" 20__

INDIVIDUAL JOB

By _____

(Type of practice)

Student ____ group's _____

(Name of student)

Educational program 19.04.01 "Biotechnology"

Base (place, organization) of practice

Duration of practice from _____ 20__ Y. To _____ 20__ Y

Generalized wording of the assignment	
---------------------------------------	--

Task Schedule

The name of the tasks (activities) that make up the task	Date of completion of the task (event)
1.	
2.	
3.	

Head of Practice _____

signature full name, position

Practice Diary Example
Far Eastern Federal University
School of Biomedicine

Head of Practice from FEFU

Head of practice from the host organization

A DIARY

By _____ practice

Student _____ course _____
group

By program _____

Place of Practice

Duration of practice _____ weeks

1. Student calendar

№ п\п	Name of work	Calendar dates		Surname of head of practice
		start	ending	

2. Student work diary

date of	Summary of work intern	Signature a manager

3. Report protection results

The report is protected by _____ 20____

With a rating of _____

Director of DPNiT _____ full name

Practice report title page form



MINISTRY OF EDUCATION AND SCIENCE OF THE RUSSIAN
FEDERATION

Federal state autonomous educational institution
of higher education

«Far Eastern Federal University»
(FEFU)

SCHOOL OF BIOMEDICINE

The report is protected with a rating of _____
" _____ " _____ 20__ Y

Director of DPNiT

_____ Full name.

REPORT

On the passage of industrial and technological practice
in _____

(Full name of the enterprise)

Student gr. _____ groups _____ (_____)

Signature full name

Supervisor
from the university _____ (_____)

Signature full name



MINISTRY OF EDUCATION AND SCIENCE OF THE RUSSIAN
FEDERATION
Federal state autonomous educational institution
of higher education
«Far Eastern Federal University»
(FEFU)

SCHOOL OF BIOMEDICINE

N A P R A V L E N I E

To practice _____

Student of the master course

_____ Last name First name _____ group
(Full Name)

Seconded to _____

Name of base organization

Address _____

Order on referral to practical training No. _____

For passing _____

In the direction of preparation 19.04.01 Biotechnology for a period from
_____ 201 to _____ 201 (continuous / discrete)

Head of Practice

Professional skills and experience in

Professional activity

M.P. _____

(Position, academic title) (Signature) (Full name)

Marks on the implementation and terms of practice

Company name	Arrival and Departure Mark	Signature, decryption of signature, stamp
Name of enterprise, organization in accordance with the contract	<i>Arrived</i> __.__.20__ г.	
	<i>Arrived</i> __.__.20__ г.	

Head of Practice _____

signature full name, position



МИНИСТЕРСТВО НАУКИ И ВЫСШЕГО ОБРАЗОВАНИЯ РОССИЙСКОЙ ФЕДЕРАЦИИ
Федеральное государственное автономное образовательное учреждение высшего образования
«Дальневосточный федеральный университет»
(ДФУ)
ШКОЛА БИОМЕДИЦИНЫ

«СОГЛАСОВАНО»

Руководитель ОП

 Каленик Т.К.

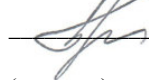
(подпись) (Ф.И.О. рук. ОП)

«12» июля 2018 г.

«УТВЕРЖДАЮ»

Директор Департамента

пищевых наук и технологий

 Ю.В. Приходько

(подпись) (Ф.И.О.)

«12» июля 2018 г.

**РАБОЧАЯ ПРОГРАММА ПРОИЗВОДСТВЕННОЙ
ПРАКТИКИ**

PREGRADUATION / ПРЕДДИПЛОМНАЯ ПРАКТИКА

Направление подготовки 19.04.01 Биотехнология

Профиль подготовки Agri-Food Biotechnology

Квалификация (степень) выпускника

магистр

г. Владивосток
2018

1. REGULATORY DOCUMENTATION REGULATING THE PROCESS OF ORGANIZING AND PASSING PRACTICES

The program was developed in accordance with the requirements of the Federal State Educational Standard of Higher Education (OS FEFU) in the direction of 19.04.01 "Biotechnology" approved by the decision of the FEFU Academic Council, protocol No. 06-15 of 06/04/2015, and put into effect by order of the rector of the FEFU on 07.07.2015 No. 12-13-1282.

2. OBJECTIVES OF DEVELOPMENT OF PREDIPLOMA PRACTICE

The objectives of undergraduate practice (or production) are to consolidate the theoretical knowledge gained in the study of compulsory disciplines; acquisition of professional skills in future professional activities; formation of ideas about the work of food enterprises.

3. OBJECTIVES OF PREDIPLOMA PRACTICE

The objectives of undergraduate practice are:

- collection of material using information and communication technologies and taking into account the basic requirements of information security for solving standard tasks of professional activity;
- acquaintance with the basic technological equipment, technological processes and safety requirements;
- familiarization with regulatory and technical documentation, regulations, veterinary norms and rules in the production process.

4. PLACE OF PREDIPLOMA PRACTICE IN THE STRUCTURE OF OP

Block B2.P.4 “Practices, including research and development (R&D)” of the educational standard independently established by FEFU, in the direction of April 19, 01 “Agri-food biotechnology”, approved by the Ministry of Education and Science of the Russian Federation dated 07.07.2015 No. 12-13-1282, is mandatory, variable and is a type of training session that is directly focused on the professional and practical training of students.

Industrial practice is the second stage of practical training at the level of higher education master's program and is aimed at students gaining professional skills and abilities, including professional skills and experience of professional activity.

Undergraduate practice is carried out in third-party organizations that have the necessary personnel and scientific and technical potential (visiting).

Pre-diploma production practice is based on the theoretical development of such disciplines as: “Methodology of scientific research in biotechnology”, “Administration and management of agriculture and the agro-industrial complex”, “Agricultural biotechnology and biotechnology of raw materials of animal and vegetable origin”, “Development of food technology for dietary therapeutic and preventive dietary nutrition. ”

Students undergoing pre-graduation practical training is an integral part of the educational process and is necessary for the acquisition of professional skills in future professional activities and the formation of ideas about the work of food enterprises.

5. TYPES, METHODS, PLACE AND TIME OF PRE-PROMPLE PRACTICE

Type of practice: undergraduate.

Way of carrying out - stationary / exit (at the choice of the student).

Practice: continuous (2 weeks at the end of 2 courses).

Practice time: 4 semester.

The venue of the practice is the structural units of FEFU (Department of Food Sciences and Technology), as well as organizations whose activities correspond to professional competencies mastered in the framework of the educational program 19.04.01 Biotechnology (at the student's choice).

Practice in third-party organizations is based on contracts in accordance with which students are given places of practice, as well as organizational and informational and methodological assistance is provided in the process of internship.

Students can independently offer places for practical training. The student begins the practice only after the official confirmation of the consent of the organization (enterprise) with the conclusion of the contract according to the general model established by the Federal State Autonomous Educational Institution of Higher Education "Far Eastern Federal University".

6. TRAINING COMPETENCIES FORMED AS A RESULT OF PREPARATION OF PREDIPLOMA PRACTICE

Code and wording of competency	Competency Stages	
OK-1 ability to creatively adapt the achievements of foreign science, technology and education to domestic practice; high degree of professional mobility	Knows	achievements of foreign science, technology and education
	Able to	apply knowledge in the field of achievements of foreign science, technology and education to domestic practice
	knows	skills to adapt the achievements of foreign science, technology and education to domestic practice; high

		degree of professional mobility
OK-4 ability to quickly master new subject areas, identify contradictions, problems and develop alternative solutions	Knows	approaches to solving problems in subject areas
	Able to	quickly master new subject areas, identify contradictions, problems and develop alternative solutions
	knows	skills to master new subject areas, identify contradictions, problems and develop alternative solutions
OK-5 ability to generate ideas in scientific and professional activities	Knows	research methods and innovations in scientific and professional activities
	Able to	generate ideas in scientific and professional activities
	knows	ability to generate ideas in scientific and professional activities
OK-9 readiness to act in non-standard situations, bear social and ethical responsibility for decisions made in the professional sphere, to increase the general cultural level	Knows	social and aesthetic rules, safety rules, duties
	Able to	act in non-standard situations, bear social and ethical responsibility for decisions made
	knows	knowledge of social and aesthetic rules, safety rules, job responsibilities
OK-11 ability to professional growth, to self-study new research methods, to change the scientific and scientific-industrial profile of their professional activities	Knows	self-study methods for new research methods
	Able to	to carry out measurements, observations and compiling a description of ongoing research
	knows	writing, reviewing and publishing skills
OK-12 ability in practice to use skills in organizing research and design work and in team management	Knows	principles of organization of research and design work in team management
	Able to	organize research and design work in team management
	knows	team management skills and organization of research and design work

OK-13 ability in practice to use skills in organizing research and design work and in team management	Knows	legal and ethical standards in assessing the consequences of their professional activities, in the development and implementation of socially significant projects
	Able to	willingness to use legal and ethical standards in assessing the consequences of their professional activities
	knows	skills of using legal and ethical standards in assessing the consequences of their professional activities, in the development and implementation of socially significant projects
OPK-1 ability to professionally use modern biotechnological equipment and scientific instruments	Knows	rules and methods for the development of technological projects
	Able to	to develop technological projects as part of the team of authors
	knows	knowledge in the development of technological projects
OPK-5 with the ability to use modern information technology to collect, process and disseminate scientific information in the field of biotechnology and related industries, the ability to use databases, software products and resources of the information and telecommunication network "Internet" (hereinafter - the "Internet" network) for solving problems professional activity	Knows	modern information technologies for the collection, processing and dissemination of scientific information
	Able to	Use modern information technology to collect, process and disseminate scientific information
	knows	modern information technologies for the collection, processing and dissemination of scientific information
OPK-6 readiness to protect intellectual property and commercialize intellectual	Knows	the basics of protecting intellectual property and commercialization of intellectual property rights

property rights	Able to	protect intellectual property and commercialization of intellectual property rights
	knows	the basics of protecting intellectual property and commercialization of intellectual property rights
PK-1 readiness for planning, organizing and conducting research in the field of biotechnology, the ability to correctly process the results of experiments and make informed conclusions and conclusions	Knows	main areas of research in the field of agriculture and biotechnology
	Able to	to receive results and draw sound conclusions from scientific research in the field of agriculture and biotechnology
	knows	basic knowledge of research methods in the field of agriculture and biotechnology
PC-2 with the ability to analyze scientific and technical information in the field of biotechnology and related disciplines with the aim of scientific, patent and marketing support for ongoing basic research and technological development	Knows	methods of organizing research and development activities, assessing the quality of performance
	Able to	use in practice the skills in organizing research and development, evaluate the quality of performance
	knows	the ability to use in practice the skills in organizing research and development, assessing the quality of performance
PK-8 ability to conduct a feasibility study of production and the preparation of technical and economic documentation	Knows	types of technological process in food production
	Able to	apply knowledge in the design of the technological process in food production
	knows	the ability to conduct a feasibility study of production and the preparation of technical and economic documentation
PK-9 readiness to use the basic principles of organization of metrological support of production	Knows	basic principles of organizing metrological support for the production of agricultural raw materials and food products
	Able to	use the basic principles of organizing metrological support for the production of agricultural raw materials and food products

	knows	skills of using the basic principles of organizing metrological support for the production of agricultural raw materials and food products
PK-10 ability to develop a quality management system for biotechnological products in accordance with the requirements of Russian and international quality standards	Knows	principles for developing a quality management system for biotechnological products in accordance with the requirements of Russian and international quality standards
	Able to	develop a quality management system for biotechnological products in accordance with the requirements of Russian and international quality standards
	knows	the principles of developing a quality management system for biotechnological products in accordance with the requirements of Russian and international quality standards
PK-11 ability to provide technological discipline, sanitary and hygienic operation of the enterprise, the maintenance of technological equipment in proper technical condition	Knows	sanitary and hygienic operation of the enterprise, maintenance of technological equipment in proper technical condition
	Able to	provide technological discipline, sanitary and hygienic operation of the enterprise, the maintenance of technological equipment in proper technical condition
	knows	the skill of ensuring the sanitary-hygienic mode of operation of the enterprise, the maintenance of technological equipment in proper technical condition
PK-12 ability to plan and carry out activities to ensure industrial safety, environmental monitoring and protection	Knows	basics of industrial safety, regulatory and technical documentation, regulations, veterinary norms and rules
	Able to	put knowledge into practice in the field of industrial safety, monitoring and environmental protection
	knows	ways to ensure industrial safety, monitoring and environmental

		protection
PK-13 readiness for organization, planning and management of existing biotechnological processes and production	Knows	principles of adaptation of modern versions of planning and quality management systems to specific production conditions based on international standards
	Able to	adapt modern versions of planning and quality management systems to specific production conditions based on international standards
	knows	willingness to adapt modern versions of planning and quality management systems to specific production conditions based on international standards
PK-14 the ability to use standard and develop new methods of engineering calculations of technological parameters and equipment of biotechnological industries	Knows	standard methods of engineering calculations of technological parameters and equipment of biotechnological industries
	Able to	use standard and develop new methods of engineering calculations of technological parameters and equipment of biotechnological industries
	knows	knowledge in the field of engineering calculations of technological parameters and equipment of biotechnological industries
PK-15 willingness to ensure the stability of production indicators and the quality of products	Knows	standards for production quality indicators
	Able to	ensure the stability of production indicators and the quality of products
	knows	the ability to ensure the stability of production indicators and the quality of products
PK-16 the ability to carry out the effective work of means of control, automation and automated production management, chemical-technical, biochemical and microbiological control	Knows	operation of control, automation and automated production control, chemical-technical, biochemical and microbiological controls
	Able to	to carry out the effective work of means of control, automation and automated production management, chemical-technical, biochemical and

		microbiological control
	knows	knowledge of the operation of controls, automation and automated production management, chemical-technical, biochemical and microbiological control
PC 17 willingness to conduct pilot development of technology and process scaling	Knows	rules for pilot development of technology and process scaling
	Able to	Pilot technology development and process scaling
	knows	Knowledge in pilot development of technology and process scaling
PK-18 ability to develop and scientifically substantiate schemes for the optimal integrated certification of biotechnological products	Knows	optimal integrated certification schemes for biotechnological products
	Able to	to develop and justify schemes for optimal integrated certification of biotechnological products
	knows	the ability to develop and scientifically substantiate schemes for the optimal integrated certification of biotechnological products
PK-19 ability to analyze technological process indicators for compliance with initial scientific developments	Knows	process indicators for compliance with initial scientific developments
	Able to	analyze the performance of the technological process for compliance with the original scientific developments
	knows	ability to analyze technological process indicators for compliance with initial scientific developments
PK-20 the ability to ensure the biological safety of raw materials, semi-finished products, finished products	Knows	process for the production of plant and animal products
	Able to	to control the quality of raw materials and products
	knows	skills to ensure the biological safety of raw materials, semi-finished

		products, finished products
PK-21 the ability to ensure the metrological state of production and the effective operation of controls, automation and automated production management	Knows	fundamentals of the technological process, quality control of products and management of automated production
	Able to	to carry out quality control of products and management of automated production
	knows	skills in product quality control and automated production management
PK-22 ability to coordinate the implementation of research results in production	Knows	ways to develop a new range of products and technologies with given composition and properties
	Able to	to develop a new range of products and technologies with specified composition and properties
	knows	skills to develop a new assortment of products and technologies with specified composition and properties

7. STRUCTURE AND CONTENT OF PRE-PROMPT PRACTICE

The total complexity of production practice is 4 weeks / 6 credits, 216 hours.

№ п/ п	Sections (stages) of practice	Types of work in practice, including independent work of students and laboriousness (in hours)			Current Control Forms	
1	Preparatory stage: - Obtaining documents for practice (direction, diary, assignment); - Arrival at the place of practice and an introductory briefing; - Organization of the workplace and acquaintance with the team.	Obtain ing docum ents for practic e (2 hours)	Introd uctory lecture (2 hours)	Safety briefing (2 h)	Making entries in the diary. Oral conversati ons.	
2	The main stage:	Accom	Safety	Study	Proce	Making

	<ul style="list-style-type: none"> - Study of the organizational structure of the base of practice; - the study of regulatory and technical documentation; - Implementation of individual production tasks; - The study of practical activities. 	<p>plishment of practice tasks in accordance with the program (62 h)</p>	<p>briefing at the enterprise (33 hours)</p>	<p>of materials and documents at the place of practical training (52 hours)</p>	<p>ssing and analysis of the obtained practice materials (45 hours)</p>	<p>entries in the diary. Oral conversations.</p>
3	<p>The final stage:</p> <ul style="list-style-type: none"> - Processing and systematization of the received material; - Preparation of a report on the passage of organizational and managerial practice; - Protection of the report on organizational and management practices. 	<p>Report writing (11h)</p>	<p>Presentation preparation (9 h)</p>	<p>Report Protection (2 hours)</p>		<p>Score with grade</p>

8. TRAINING AND METHODOLOGICAL SUPPORT OF STUDENTS'S INDEPENDENT WORK IN PREDIPLOMA PRACTICE

Undergraduate practice is aimed at familiarizing students with the logistics of the enterprise / workshop / laboratory, software and modern methods of analysis of raw materials.

During pre-diploma practice, regardless of the place of its passage, students should pay special attention to issues related to life safety, labor protection and industrial sanitation. For this, it is necessary to consider

the principles of state and public control over the observance of labor legislation, the organization of the life safety service and its tasks.

An individual assignment (Appendix 1) is issued to the student at the university by the practice leader before the practice begins. It should be associated with the technology of obtaining one of the types of meat products.

Control questions:

1. Give the characteristic, specialization and production profile of the food enterprise.

2. Describe the material and technical base, raw material zone and capacity of the enterprise.

3. What is the mode of operation of the enterprise (how many shifts per day, month)?

4. Give the structure of the organization of the enterprise, the management scheme.

5. Describe the range of products.

6. Give a description of the production lines, describe the production scheme of the main names of products.

7. What is the role and importance of the laboratory in the enterprise?

8. What methods of analysis of raw materials, semi-finished products and finished products are carried out at the enterprise?

9. What forms of magazines are presented in the laboratory and on the production sites of the enterprise?

10. What measures are being taken on labor safety, on sanitary-hygienic, fire-preventive measures at the enterprise?

11. What activities are carried out at the enterprise to improve working conditions?

12. How is electricity, gas and water supplied to the enterprise?

13. How are finished products delivered to retail chains?

14. Measures to reduce production defects and return finished products with expired storage from retail chains.

15. What is the sales area of the enterprise?

9. FORMS OF CERTIFICATION (BY THE RESULTS OF PRACTICE)

Before undergraduate practice, a student receives an individual task from the head of practice from the university, the contents and volume of which are agreed upon with the head of practice.

Based on the results of the practice, the student draws up a report on the passage of practice, participates in the final conference with the presentation of the results of the practice, after which she receives an offset with an assessment.

The practice report should contain the following elements:

- Title page (Appendix 3);
- Assignment and schedule of practice (Appendix 1);
- Introduction;
- Report on production activities in the process of internship;
- Sources of information;

The report is drawn up in accordance with the "Requirements for the design of written work performed by students and students of FEFU."

The volume of the report depends on the topic of the individual assignment.

Sample report structure

1. General information about the enterprise and its brief description (history, geographical location, list of main workshops, buildings and

structures with an indication of their purpose; information about the main services of the enterprise).

2. The structure of the enterprise and its individual divisions, its raw material base.

3. The range of products and their characteristics. Regulatory documents for manufactured products. Design and operating capacity of the enterprise.

4. Individual task. Describe the production technology of one of the types of products (requirements for raw materials and finished products, formulation, methods of technological control, description of the main technological stages of production and methods of waste disposal).

5. Describe the applicable types of packaging, storage conditions, types of control of finished products.

6. Conclusion.

By agreement with the head of practice from the university and depending on the location of this type of practice, the structure of the report or its individual parts may change.

After graduation and preparation of the report in accordance with the requirements, the student submits his report to the defense of the head from the university. According to the results of the defense, a test is set with a rating (excellent, good, satisfactory, unsatisfactory):

“Excellent” - the necessary practical work skills and professional competencies provided for by the practical training program are fully formed, the tasks are completed, the quality of their implementation is estimated by the number of points close to the maximum.

“Good” - the necessary practical work skills and professional competencies provided for by the practical training program are fully formed, the tasks are completed, the quality of execution of none of them

is estimated by the minimum number of points, some types of tasks are completed with errors or not thoroughly enough.

“Satisfactory” - the necessary practical work skills and professional competencies are mainly formed, the gaps are not significant, some of the completed tasks contain errors.

“Unsatisfactory” - the necessary practical work skills and professional competencies provided for by the production program are not formed, all completed training tasks contain gross errors, additional independent work on the report materials will not lead to any significant improvement in the quality of the tasks.

10. EDUCATIONAL AND METHODOLOGICAL AND INFORMATION SUPPORT OF PRODUCTION PRACTICE

a) The main:

1. Antipova, L.V. Technology and equipment for the production of sausages and semi-finished products [Electronic resource]: study guide / L.V. Antipova, I.N. Tolpygina, A.A. Kalachev. - The electron. Dan. - St. Petersburg: GIORD, 2012. -- 600 p. <https://e.lanbook.com/book/4880>

2. Vostroilov, A.V. The basics of milk processing and examination of the quality of dairy products [Electronic resource]: study guide / A.V. Vostroilov, I.N. Semenova, K.K. Polyansky. - The electron. Dan. - St. Petersburg: GIORD, 2010. <https://e.lanbook.com/book/58746>

3. Gaibova T.V. Undergraduate practice [Electronic resource]: textbook / Gaibova T.V., Tugov V.V., Shumilina N.A. - Electron. textual data. —Orenburg: Orenburg State University, EBS DIA, 2016.— 131 p. <http://www.iprbookshop.ru/69932.html>

4. Preparation of final qualification work (master's thesis): guidelines / [comp. : A. A. Lapidus, M. N. Ershov, P. P. Oleinik et al.]. Moscow: DIA, 2016 .-- 36 p.
<http://lib.dvfu.ru:8080/lib/item?id=chamo:842462&theme=FEFU>

5. Chemistry of food products: Per. from English / ed. : Srinivasan Damodaran, Kirk L. Parkin, Owen R. Fennema. St. Petersburg: Profession, 2012 .-- 1039 p.
<http://lib.dvfu.ru:8080/lib/item?id=chamo:675478&theme=FEFU>

6. General biology and microbiology: guidelines for laboratory work, part 3 / Pacific State University of Economics; [comp. : J. G. Prokopets, E. S. Fischenko, S. V. Zhuravlev]. Vladivostok: Publishing House of the Pacific Economic University, 2010. - 44 p.
<http://lib.dvfu.ru:8080/lib/item?id=chamohaps5757292&theme=FEFU>

7. Measuring methods for monitoring indicators of quality and food safety: [study guide] [at 2 o'clock]: o'clock 1. Products of plant origin / V.V. Shevchenko, A.A. Vytovtov, L.P. Nilova [et al.]. St. Petersburg: Trinity Bridge, 2009 .-- 303 p.
<http://lib.dvfu.ru:8080/lib/item?id=chamo:358418&theme=FEFU>

8. Biotechnology: a textbook for high schools / S.M. Klunova, T.A. Egorova, E.A. Zhivukhina, Moscow: Academy, 2010 .-- 256 p.
<http://lib.dvfu.ru:8080/lib/item?id=chamo:416005&theme=FEFU>

b) Additional:

1 Auerman, L.Ya. Technology of baking production: Textbook / L.Ya. Auerman. - 9th ed., Revised. and add. / Under the total. ed. L.I. Puchkova. - St. Petersburg: Profession, 2009 .-- 416 p.
<http://lib.dvfu.ru:8080/lib/item?id=chamo:316025&theme=FEFU>

2 Borisenko, L.A. Biotechnological basis for the intensification of production of salted meat products / A.A. Borisenko, A.A. Bratsikhin. - M.: DeLi print, 2010. -- 163 p. <http://lib.dvfu.ru:8080/lib/item?id=chamo:342770&theme=FEFU>

3 Ivashov, V.I. Technological equipment for meat industry enterprises: a textbook for high schools / V.I. Ivashov. - St. Petersburg.: GIORD, 2010. - 736 pp. <Http://lib.dvfu.ru:8080/lib/item?id=chamo{59114&theme=FEFU>

4 Rogov, I.A. General technology of meat and meat products / I.A. Rogov, A.G. Zabashta, G.P. Kazyulin. - M.: KolosS, 2010. -- 367 p. <http://lib.dvfu.ru:8080/lib/item?id=chamo{40686&theme=FEFU>

The list of resources of the information and telecommunication network "Internet".

1. <http://elibrary.ru> Scientific Electronic Library eLIBRARY.RU
2. The electronic library system "Doe" <http://e.lanbook.com/>
3. The electronic library system "IPRBOOK" <http://www.iprbookshop.ru>
4. Scopus database: <http://www.scopus.com/home.url>
5. Web of Science database <http://apps.webofknowledge.com/>
6. Database of full-texting academic journals in China <http://oversea.cnki.net/>
7. The electronic library of dissertations of the Russian State Library <http://diss.rsl.ru/>
8. EBSCO Electronic Databases <http://search.ebscohost.com/>

11. MATERIAL AND TECHNICAL SUPPORT OF PRODUCTION AND TECHNOLOGICAL PRACTICE

The venue of the practice is the structural units of FEFU (Department of Food Sciences and Technology), as well as organizations whose activities correspond to professional competencies mastered in the framework of the educational program 19.04.01 Biotechnology (at the student's choice).

The practice bases may be workshops and laboratories of industrial enterprises of food and processing profile (meat processing enterprises) equipped with modern technological equipment and testing instruments that allow controlling the quality of raw materials and manufactured products, laboratories for analyzing and evaluating the quality of food products.

The main practice bases: Vladkhleb OJSC bread production enterprise; enterprises for the production of milk and dairy products: LLC Artyomovsky Dairy Plant, LLC Arsenyevsky Dairy Plant, LLC HAPK Green Agro; enterprises for the production of meat and sausages: LLC Elephant, LLC Dobroe del, LLC Nikolsk, LLC Ratimir; Confectionery company: Primorsky Confectioner OJSC, etc.

The material and technical support for the implementation of the practice on the basis of the Department of Food Sciences and Technologies includes lecture halls and practical classes equipped with multimedia equipment and corresponding to sanitary and opposing rules and norms.

№ п/п	Name of special rooms and premises for independent work	Equipped with special rooms and rooms for independent work
3	690022, Primorsky Territory, Vladivostok, Russky Island, Saperny Peninsula, village of Ajax 10, auditorium M 311.	Training furniture for 25 workplaces, teacher's place (table, chair), Analytical and technological equipment (M311): Milk centrifuge

	<p>M311- The classroom for lecture-type classes, seminar-type classes, group and individual consultations, ongoing monitoring and interim certification.</p>	<p>with heating IJIM 1-12; Liquid thermostat LOIP Lt-208a, volume 8l, 120x150 / 200mm; Analyzer of milk quality Lactan 1-4 mod. 230; PH-millivoltmeter with tripod pH-150MI; VSP 1.5-2-3T scales; Refrigerator "Ocean-RFD-325B"; Drying cabinet, stainless steel chamber. steel, 58l; electric stove 111CH 101-226589; PE-6110 magnetic stirrer with heating; VNZh-0,3-KhS3 viscometer (d-1.41) glass capillary; Tripod PE-2710 lab. for burettes.</p> <p>Multimedia equipment: Monoblock Lenovo C360G-i34164G500UDK; Screen with electric 236 * 147 cm Trim Screen Line; DLP projector, 3000 ANSI Lm, WXGA 1280x800, 2000: 1 EW330U Mitsubishi; Subsystem of specialized hardware mounts CORSA-2007 Tuarex; Video Switching Subsystem: DVI DXP 44 DVI Pro Extron matrix switcher; Extender DVI over twisted pair DVI 201 Tx / Rx; Subsystem of audio switching and sound reinforcement; ceiling mount speaker SI 3CT LP Extron; Sennheiser EW 122 G3 UHF Microphone Lavalier Radio System with a wireless microphone and receiver; DMP 44 LC Extron digital audio processor; Extron IPL T S4 Network Management Controller; Wireless LANs for students are provided with a system based on 802.11a / b / g / n 2x2 MIMO (2SS) access points.</p>
4	<p>690022, Primorsky Territory, Vladivostok, Russky Island, Saperny Peninsula, village of Ajax 10, auditorium M621.</p> <p>M621- The classroom for the implementation of design work, lecture-type classes, seminar-type classes, group and individual consultations, ongoing monitoring</p>	<p>Training furniture for 17 workplaces, Teacher's place (table, chair), Computer class: Monoblock Lenovo C360G-i34164G500UDK 19.5 "Intel Core i3-4160T 4GB DDR3-1600 SODIMM (1x4GB) 500GB Windows Seven Enterprise - 17 pcs; Wired LAN - Cisco 800 series; Wireless LAN for students is provided with a system based on</p>

	and interim certification.	802.11a / b / g / n 2x2 MIMO (2SS) access points.
6	690922, Primorsky Territory, Vladivostok, Russky Island, Saperny Peninsula, village of Ajax, 10, building A, aud. A1017. Reading rooms of the FEFU Scientific Library with open access to the fund (building A - level 10) Audience for independent work of graduate students.	The room is equipped with specialized training furniture (seats - 15) Equipment: Monoblock Lenovo C360G-i34164G500UDK - 15 pcs. Integrated Polymedia FlipBox Touchscreen Display - 1 pc. Copier-printer-color scanner in e-mail with 4 trays Xerox WorkCentre 5330 (WC5330C - 1 pc.

In order to ensure special conditions for the training of disabled and disabled people in FEFU, all buildings are equipped with ramps, elevators, lifts, specialized places, equipped with toilets, information and navigation support signs.

For people with disabilities and people with disabilities, the choice of practice places is consistent with the requirement of their accessibility for these students and the practice is conducted taking into account the peculiarities of their psychophysical development, individual capabilities and health status.

Compiled by (s):

Professor of the Department of Food Sciences and Technology,
Doctor of Biological Sciences, Professor Kalenik T.K.

Associate professor, Department of Food Sciences and Technology, T. Senotrusova

The practice program was discussed at a meeting of the Department of Food Sciences and Technology, protocol No. 1 dated July 11, 2018.



MINISTRY OF EDUCATION AND SCIENCE OF THE RUSSIAN
FEDERATION
Federal state autonomous educational institution
of higher education
«Far Eastern Federal University»
(FEFU)

SCHOOL OF BIOMEDICINE

«AGREED»
Head of education program

_____ FULL NAME.
"___" _____ 20__

INDIVIDUAL JOB

By _____

(Type of practice)

Student ___ group's _____

(Name of student)

Educational program 19.04.01 "Biotechnology"

Base (place, organization) of practice

Duration of practice from _____ 20__ Y. To _____ 20__ Y

Generalized wording of the assignment	
---------------------------------------	--

Task Schedule

The name of the tasks (activities) that make up the task	Date of completion of the task (event)
1.	
2.	
3.	

Head of Practice _____

signature full name, position

Practice Diary Example
Far Eastern Federal University
School of Biomedicine

Head of Practice from FEFU

Head of practice from the host organization

A DIARY

By _____ practice

Student _____ course _____
group

By program _____

Place of Practice

Duration of practice _____ weeks

1. Student calendar

№ п/п	Name of work	Calendar dates		Surname of head of practice
		start	ending	

2. Student work diary

date of	Summary of work intern	Signature a manager

3. Report protection results

The report is protected by _____ 20____

With a rating of _____

Director of DPNiT _____ Full name

Practice report title page form



MINISTRY OF EDUCATION AND SCIENCE OF THE RUSSIAN
FEDERATION
Federal state autonomous educational institution
of higher education
«Far Eastern Federal University»
(FEFU)

SCHOOL OF BIOMEDICINE

The report is protected with a rating of _____
" _____ " _____ 20__ Y

Director of DPNiT

_____ Full name.

REPORT

On the passage of industrial and technological practice

(Full name of the enterprise)

Student gr. _____ groups _____ (_____)
Signature full name

Supervisor
from the university _____ (_____)
Signature full name

MINISTRY OF EDUCATION AND SCIENCE OF THE RUSSIAN
FEDERATION

Federal state autonomous educational institution
of higher education

«Far Eastern Federal University»
(FEFU)

SCHOOL OF BIOMEDICINE

N A P R A V L E N I E

To practice _____

Student of the master course

_____ Last name First name _____ group
(Full Name)

Seconded to _____

Name of base organization

Address _____

Order on referral to practical training No. _____

For passing _____

In the direction of preparation 19.04.01 Biotechnology for a period from
_____ 201 to _____ 201 (continuous / discrete)

Head of Practice

Professional skills and experience in

Professional activity

M.P. _____

(Position, academic title) (Signature) (Full name)

Marks on the implementation and terms of practice

Company name	Arrival and Departure Mark	Signature, decryption of signature, stamp
Name of enterprise, organization in accordance with the contract	<i>Arrived</i> __.__.20__ г.	
	<i>Arrived</i> __.__.20__ г.	

Head of Practice _____

signature full name, position