

**МИНОБРНАУКИ РОССИИ**  
**Федеральное государственное бюджетное образовательное**  
**учреждение высшего образования "Пермский**  
**государственный национальный исследовательский**  
**университет"**

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Программа производственной практики  
**UNDERGRADUATE PRACTICE**  
Код УМК 93099

Утверждено  
Протокол №6  
от «23» марта 2020 г.

Пермь, 2020

## **1. Вид практики, способ и форма проведения практики**

Вид практики **производственная**

Тип практики **преддипломная практика**

Способ проведения практики **стационарная, выездная**

Форма (формы) проведения практики **дискретная**

## **2. Место практики в структуре образовательной программы**

Производственная практика « Undergraduate practice » входит в обязательную часть Блока « С.2 » образовательной программы по направлениям подготовки (специальностям):

Специальность: **33.05.01** Фармация

направленность Программа широкого профиля (для иностранных граждан)

### **Цель практики :**

The purpose of undergraduate practice: ensuring the independent preparation of the graduate for the implementation of the experimental part of the graduate qualification work of a specialist; providing methodological guidance to the independent work of a graduate through the organization of his activities on the implementation of the experimental part of the final qualifying work, processing the empirical data obtained, on the systematization and integration of theoretical knowledge and practical skills in the direction of training "Pharmacy".

### **Задачи практики :**

Consolidation of theoretical learning outcomes; acquisition of skills and practical work (development of safety in the laboratory, methods of preparation and implementation of complex syntheses, application of the basics of physical and chemical analysis in practice, description and synthesis of research results).

### 3. Перечень планируемых результатов обучения

В результате прохождения практики **Undergraduate practice** у обучающегося должны быть сформированы следующие компетенции:

**33.05.01** Фармация (направленность : Программа широкого профиля (для иностранных граждан))

**ОПК.2** Владеет базовыми знаниями в области информатики, навыками использования программных средств и работы в компьютерных сетях, способность приобретать новые знания, используя современные информационные технологии

#### **Индикаторы**

**ОПК.2.2** Применяет знания в области информатики в объеме, необходимом для использования специализированных программных средств в профессиональной сфере для обработки и анализа данных наблюдений

**ОПК.7** Способен представлять результаты своей работы в устной и письменной форме в соответствии с нормами и правилами, принятыми в профессиональном сообществе

#### **Индикаторы**

**ОПК.7.1** Представляет результаты работы в виде письменного отчета с учетом требований библиографической культуры

**ОПК.7.2** Готовит и представляет презентацию по теме работы

**ОПК.7.3** Представляет результаты работы в виде научной публикации (тезисы доклада, статья, научный обзор)

**ПК.6** Готов к проведению и руководству научно-исследовательской работой в области фармации, участию во внедрении новых методик в сфере разработки и производства лекарственных средств

#### **Индикаторы**

**ПК.6.2** Разрабатывает методики получения и производства новых лекарственных препаратов

**УК.1** Способен осуществлять анализ проблемных ситуаций и выработать решение на основе системного подхода

#### **Индикаторы**

**УК.1.2** Работает с противоречивой информацией из разных источников, находит пробелы в необходимой для разрешения проблемы информации, определяет варианты устранения пробелов

**УК.2** Способен управлять проектом, организовывать и руководить работой команды

#### **Индикаторы**

**УК.2.3** Разрабатывает мероприятия по реализации проекта на разных этапах его жизненного цикла, вносит корректировки в ходе реализации проекта

**УК.3** Способен осуществлять коммуникации в рамках академического и профессионального взаимодействия на русском и иностранном языках

#### **Индикаторы**

**УК.3.3** Представляет результаты деятельности на публичных мероприятиях в устной и письменной формах

#### 4. Содержание и объем практики, формы отчетности

Undergraduate practice is independent work of the student under the guidance of the teacher of the graduating Department. Undergraduate practice is a preparatory stage for the development of the project of Final qualifying work.

<b>Направления подготовки</b>	33.05.01 Фармация (направленность: Программа широкого профиля (для иностранных граждан))
<b>форма обучения</b>	очная
<b>№№ триместров, выделенных для прохождения практики</b>	14,15
<b>Объем практики (з.е.)</b>	6
<b>Объем практики (ак.час.)</b>	216
<b>Форма отчетности</b>	Экзамен (15 триместр)

#### Примерный график прохождения практики

Количество часов	Содержание работ	Место проведения
<b>Preparatory stage stage</b>		
52	The preparatory stage, which includes familiarization with the features of this course of practice, the requirements for students when passing the PP, production instruction, distribution and issuance of documents (directions).	Faculty of chemistry, Perm state University
<b>Practical stage</b>		
134	Laboratory research. Production of dosage forms and carrying out mandatory types of intra-intestinal control. Pharmaceutical consulting and sale of medicines and pharmacy products. Organization of activity of structural divisions of pharmacy and management of pharmacy organization in rural areas (in the absence of a specialist with higher education). Implementation of the practical part of the final qualifying work.	Pharmacy "planet health" and "Performace" Perm drugstores "Pharmacies Udmurt Republic" Udmurt Republic, laboratory
<b>Production of dosage forms and carrying out mandatory types of intra-intestinal control</b>		
30	Preparation of solid, liquid, soft, sterile, aseptic dosage forms. Carrying out mandatory types of intra-pharmacy quality control of medicines, registration of control results, packaging and registration of medicines for release, use of regulatory documentation.	Pharmacy "planet health" and "Performace" Perm drugstores "Pharmacies Udmurt Republic" Udmurt Republic, laboratory
<b>Realization of medicines and goods of pharmacy assortment</b>		
30	The use of modern technologies and the issuance of reasonable recommendations for the release of goods pharmacy range. Design of the trading floor with the use of merchandising elements. Compliance with the storage conditions of medicines and pharmacy products. Informing consumers about the rules of collection, drying and storage of medicinal plant raw materials. Providing advice to ensure responsible self-treatment. The use of	Pharmacy "planet health" and "Performace" Perm drugstores "Pharmacies Udmurt Republic" Udmurt Republic, laboratory

Количество часов	Содержание работ	Место проведения
	<p>verbal and nonverbal ways of communication in professional activities. Organization of work: the organization of reception, storage, accounting, release of medicines and goods of pharmaceutical assortment in the organizations of wholesale and retail trade.</p> <p>Organization of work on compliance with the sanitary regime, labor protection, safety and fire safety. The formation of socio-psychological climate in the resolution of conflict situations. Use of the computer method of collection, storage and processing of the information applied in professional activity, application programs of providing pharmaceutical activity. Protection of their rights in accordance with labor legislation.</p>	
Implementation of the practical part of the final qualifying work		
74	Performed in accordance with the individual task to perform WRC	Laboratories of "Pharmaceutical and industrial technology", "Biochemistry and pharmacognosy", "Research works" of PSNIU and laboratory of pharmaceutical company "Medisorb", equipped with specialized equipment. The composition of the equipment is defined in the Passport of the laboratory
Final stage		
30	Analysis and interpretation of experimental data, description of the study and its results, discussion and generalization of the results of the study, the formulation of conclusions.	Faculty of chemistry, Perm state University

## 5. Перечень учебной литературы, необходимой для проведения практики

### Основная

1. A.N.M Alamgir. Therapeutic Use of Medicinal Plants and Their Extracts: Volume 1. Springer International Publishing AG, 2017. Online. ISBN 978-3-319-63861-4. Текст электронный.  
<https://link.springer.com/book/10.1007/978-3-319-63862-1>
2. Marianthi G. Ierapetritou, Rohit Ramachandran Process Simulation and Data Modeling in Solid Oral Drug Development and Manufacture. Springer Science+Business Media, New York, 2016. Online ISBN978-1-4939-2996-2. Текст электронный // : <https://link.springer.com/book/10.1007/978-1-4939-2996-2#toc>  
<https://link.springer.com/book/10.1007/978-1-4939-2996-2>

### Дополнительная

1. Zaheer-Ud-Din Babar. Pharmacy Practice Research Methods / Zaheer-Ud-Din Babar // Publisher Name: Springer, Singapore. — 2020. — 265 p. — ISBN 978-981-15-2993-1. — [Электронный ресурс].  
<https://link.springer.com/book/10.1007/978-981-15-2993-1>
2. Aiko Inui. Herbal Medicines. New Horizons / Aiko Inui // Publisher Name: Humana Press, New York, NY. - 2016. -264 p. ISBN 978-1-4939-4002-8. [Электронный ресурс]. <https://link.springer.com/book/10.1007/978-1-4939-4002-8>
3. Ali R. Rajabi-Siahboomi Multiparticulate Drug Delivery. Formulation, Processing and Manufacturing. Controlled Release Society, 2017. Online ISBN 978-1-4939-7012-4. Текст электронный // :  
<https://link.springer.com/book/10.1007/978-1-4939-7012-4#toc> <https://link.springer.com/book/10.1007/978-1-4939-7012-4>
4. Yvonne Bouwman-Boer, V'Iain Fenton-May, Paul Le Brun Practical Pharmaceutics. An International Guideline for the Preparation, Care and Use of Medicinal Products. KNMP and Springer International Publishing Switzerland 2015. Online ISBN 978-3-319-15814-3. Текст электронный // :  
<https://link.springer.com/book/10.1007/978-3-319-15814-3> <https://link.springer.com/book/10.1007/978-3-319-15814-3>

## **6. Перечень ресурсов сети «Интернет», требуемых для проведения практики**

Для проведения практики использование ресурсов сети «Интернет» не предусмотрено.

## **7. Перечень информационных технологий, используемых при проведении практики**

Образовательный процесс по практике **Undergraduate practice** предполагает использование следующего программного обеспечения и информационных справочных систем:

Presentation materials (slides on the topics of lectures and workshops);

on-line access to the Electronic library system (EBS)

access to the electronic information and educational environment of the University;

Internet services and electronic resources (search engines, e-mail, professional thematic chats and forums, audio and video conferencing systems, online encyclopedias, etc.).

The list of necessary licensed and (or) freely distributed software :

1.The application allows you to view and play media content PDF-files "Adobe Acrobat Reader DC".

2.Programs, video demonstrations (player) "Windows Media Player".

3.The program of browsing Internet content (a browser) "Google Chrome".

4.Office Suite applications f "Libreoffice".

При освоении материала и выполнения заданий по дисциплине рекомендуется использование материалов, размещенных в Личных кабинетах обучающихся ЕТИС ПГНИУ (**student.psu.ru**).

При организации дистанционной работы и проведении занятий в режиме онлайн могут использоваться:

система видеоконференцсвязи на основе платформы BigBlueButton (<https://bigbluebutton.org/>).

система LMS Moodle (<http://e-learn.psu.ru/>), которая поддерживает возможность использования текстовых материалов и презентаций, аудио- и видеоконтент, а так же тесты, проверяемые задания, задания для совместной работы.

система тестирования Indigo (<https://indigotech.ru/>).

## **8. Описание материально-технической базы, необходимой для проведения практики**

Independent work-laboratory "Pharmaceutical and industrial technology", "Biochemistry and pharmacognosy", "Research works" PSU and laboratory pharmaceutical company "Medisorb", equipped with specialized equipment. The composition of the equipment is defined in the Passport of the laboratory.

Помещения научной библиотеки ПГНИУ для обеспечения самостоятельной работы обучающихся:

1. Научно-библиографический отдел, корп.1, ауд. 142. Оборудован 3 персональными компьютера с доступом к локальной и глобальной компьютерным сетям.

2. Читальный зал гуманитарной литературы, корп. 2, ауд. 418. Оборудован 7 персональными компьютерами с доступом к локальной и глобальной компьютерным сетям.

3. Читальный зал естественной литературы, корп.6, ауд. 107а. Оборудован 5 персональными компьютерами с доступом к локальной и глобальной компьютерным сетям.

4. Отдел иностранной литературы, корп.2 ауд. 207. Оборудован 1 персональным компьютером с доступом к локальной и глобальной компьютерным сетям.

5. Библиотека юридического факультета, корп.9, ауд. 4. Оборудована 11 персональными компьютерами с доступом к локальной и глобальной компьютерным сетям.

6. Читальный зал географического факультета, корп.8, ауд. 419. Оборудован 6 персональными

компьютерами с доступом к локальной и глобальной компьютерным сетям.

Все компьютеры, установленные в помещениях научной библиотеки, оснащены следующим программным обеспечением:

Операционная система ALT Linux;

Офисный пакет Libreoffice.

Справочно-правовая система «КонсультантПлюс»

## **9. Методические указания для обучающихся по освоению дисциплины**

All of the students before the internship required to undergo a medical examination, instruction on safety.

Management of pre-graduate practice is carried out by the head appointed by the head.department.

Students during the internship are obliged to:

- 1) observe the established work schedule and follow the instructions of the practice managers;
- 2) daily record the results of the work in the diary, assuring them with the signature of the responsible person;
- 3) in the last entry in the diary to make a summary in which to highlight the main results of the practice.

For students with disabilities and persons with disabilities on the basis of their written application the organization of practice is realized taking into account features of psychophysical development, individual opportunities and health status of students. This ensures compliance with the following General requirements: use of special technical means of training collective and individual use, provision of services of the assistant rendering

such learner needs technical assistance, convenient access to buildings and premises where practices are held, other conditions without which it is impossible or difficult passing practice.

Choice of places of practice for disabled people and persons with disabilities it is made taking into account the requirements of accessibility for students and recommendations medical and social expertise reflected in the individual rehabilitation program invalid's. At the direction of the disabled person or the person with HIA in the organization, on the enterprise for the head agrees with the enterprise on passing of industrial practice conditions of its passing and types of activity taking into account recommendations medico-social examination and individual rehabilitation program of the disabled person.

For the development of the theoretical part of the practice of the disabled and persons with disabilities health opportunities are provided the opportunity to use electronic technologies, remote mastering of material by providing tasks and their control through the Internet, as well as individual consultations with the application of both e-mail, and visual communication using "Skype".

When performing the experimental part of the practice as needed additional means of protection are provided, individual assistance is provided training and support personnel, as well as other activities taking into account nosologies diseases of students.

Format of protection of practice reports for persons with disabilities and persons with disabilities it is established taking into account their individual psychophysical features (orally, in writing, using electronic or other technical means). In the process of protection the student with HIA has the right to use the necessary technical means. For the visually impaired, a portable video magnifier may be provided, possibly using your own devices. For deaf and hard of hearing students can be the sound amplifying equipment is presented, it is possible to use the equipment individual use. At the request of a student with HIA in the process of protecting the report on

in practice, the presence of an assistant can be provided to assist the student the necessary technical assistance, taking into account its individual characteristics. By if necessary, persons with disabilities and persons with disabilities may be granted additional time preparation of replies in the reports of the practice.



## Фонды оценочных средств для проведения промежуточной аттестации

### Планируемые результаты обучения по дисциплине для формирования компетенции. Индикаторы и критерии их оценивания

#### ОПК.7

**Способен представлять результаты своей работы в устной и письменной форме в соответствии с нормами и правилами, принятыми в профессиональном сообществе**

Компетенция	Планируемые результаты обучения	Критерии оценивания результатов обучения
<p><b>ОПК.7.1</b> Представляет результаты работы в виде письменного отчета с учетом требований библиографической культуры</p>	<p>To know: requirements of bibliographic culture, methods and methods of analysis and generalization of information. To be able to: interpret, analyze and summarize information. To possess: skills of interpretation, analysis and generalization of information, preparation of the report taking into account requirements of bibliographic culture.</p>	<p style="text-align: center;"><b>Неудовлетворительно</b></p> <p>The student is not able to present the results of scientific work in the form of a written report.</p> <p style="text-align: center;"><b>Удовлетворительно</b></p> <p>The student is able to present the results of scientific work in the form of a written report, not taking into account the requirements of bibliographic culture.</p> <p style="text-align: center;"><b>Хорошо</b></p> <p>The student is able to present the results of scientific work in the form of a written report, taking into account the requirements of bibliographic culture. Minor mistakes were made in the design of the scientific work.</p> <p style="text-align: center;"><b>Отлично</b></p> <p>The student is able to present the results of scientific work in the form of a written report, taking into account the requirements of bibliographic culture..</p>
<p><b>ОПК.7.2</b> Готовит и представляет презентацию по теме работы</p>	<p>To know: methods and tools needed to create a presentation on the topic of the work. To be able to: analyze, summarize and logically build data in the preparation of presentations on the topic of work. To possess: information and communication technology skills necessary to create a presentation on the topic of the work.</p>	<p style="text-align: center;"><b>Неудовлетворительно</b></p> <p>The student is not able to prepare and present the materials of his work in the form of a presentation.</p> <p style="text-align: center;"><b>Удовлетворительно</b></p> <p>The student is able to prepare and present the materials of his work in the form of a presentation, the material is not fully reflected or incorrectly, there is no uniformity of design.</p> <p style="text-align: center;"><b>Хорошо</b></p> <p>The student is able to prepare and present the materials of his work in the form of a presentation, the material is reflected in full and correctly, but illogically built, decorated uniformly.</p> <p style="text-align: center;"><b>Отлично</b></p> <p>The student is able to prepare and present the materials of his work in the form of a</p>

		<p style="text-align: center;"><b>Отлично</b></p> <p>presentation, the material is reflected in full and correctly, logically built, decorated uniformly.</p>
<p><b>ОПК.7.3</b> Представляет результаты работы в виде научной публикации (тезисы доклада, статья, научный обзор)</p>	<p>To know: terminology of the specialty. To be able to: interpret experimental data, present the results of the work in the form of a scientific publication. To possess: skills of presentation of results of work in the form of the scientific publication.</p>	<p style="text-align: center;"><b>Неудовлетворительно</b></p> <p>The student is not able to submit a scientific publication based on the materials of his work.</p> <p style="text-align: center;"><b>Удовлетворительно</b></p> <p>The student is able to submit a scientific publication based on the materials of his work, the material is not fully reflected or incorrectly.</p> <p style="text-align: center;"><b>Хорошо</b></p> <p>The student is able to submit a scientific publication based on the materials of his work, the material is reflected in full or correctly, there are difficulties with compliance with the requirements for registration of scientific publications.</p> <p style="text-align: center;"><b>Отлично</b></p> <p>The student is able to submit a scientific publication based on the materials of his work, the material is not fully reflected or incorrectly, in compliance with the requirements for registration of scientific publications.</p>

## ОПК.2

**Владеет базовыми знаниями в области информатики, навыками использования программных средств и работы в компьютерных сетях, способность приобретать новые знания, используя современные информационные технологии**

Компетенция	Планируемые результаты обучения	Критерии оценивания результатов обучения
<p><b>ОПК.2.2</b> Применяет знания в области информатики в объеме, необходимом для использования специализированных программных средств в профессиональной сфере для обработки и анализа данных наблюдений</p>	<p>To know: specialized software tools used in pharmaceutical activities to process and analyze observational data. To be able to: use specialized software tools used in pharmaceutical activities for processing and analysis of observational data. To possess: skills of using specialized software tools used in pharmaceutical activities for processing and analysis of observational data.</p>	<p style="text-align: center;"><b>Неудовлетворительно</b></p> <p>The student is not able to use specialized software in the professional field for the processing and analysis of observational data.</p> <p style="text-align: center;"><b>Удовлетворительно</b></p> <p>The student is able to use specialized software in the professional field for processing observational data, there are serious difficulties in data analysis.</p> <p style="text-align: center;"><b>Хорошо</b></p> <p>The student is able to use specialized software in the professional field for processing observational data, there are small difficulties in data analysis.</p> <p style="text-align: center;"><b>Отлично</b></p> <p>The student is able to use specialized software in the professional field for the processing and analysis of observational data.</p>

## ПК.6

Готов к проведению и руководству научно-исследовательской работой в области фармации, участию во внедрении новых методик в сфере разработки и производства лекарственных средств

Компетенция	Планируемые результаты обучения	Критерии оценивания результатов обучения
<b>ПК.6.2</b> Разрабатывает методики получения и производства новых лекарственных препаратов	To know: modern methods of synthesis and production of drugs. To be able: to develop and improve methods of synthesis in laboratory and production conditions. To possess: methods modern methods of synthesis and production of drugs, skills of development and improvement of methods of synthesis in laboratory and production conditions.	<b>Неудовлетворительно</b> The student is not able to develop, change and choose the conditions for the methods of obtaining and producing new drugs. <b>Удовлетворительно</b> The student is able to develop, change and choose the conditions for the methods of obtaining new drugs, but there are serious difficulties at the stage of scaling in the production environment. <b>Хорошо</b> The student is able to develop, change and choose the conditions for the methods of obtaining new drugs, but there are small difficulties at the stage of scaling in the production environment. <b>Отлично</b> The student is able to develop, change and choose the conditions for the methods of obtaining and production of new drugs.

## УК.1

Способен осуществлять анализ проблемных ситуаций и вырабатывать решение на основе системного подхода

Компетенция	Планируемые результаты обучения	Критерии оценивания результатов обучения
<b>УК.1.2</b> Работает с противоречивой информацией из разных источников, находит пробелы в необходимой для разрешения проблемы информации, определяет варианты устранения пробелов	To know: the main types of sources of scientific-medical and scientific-pharmaceutical information, criteria for assessing the reliability of sources of medical and pharmaceutical information. To be able: to critically assess the reliability of various sources of information in solving problems of scientific research, using different sources, to collect the necessary data and analyze them. To possess: skills of selection of	<b>Неудовлетворительно</b> The student is not able to identify gaps in the necessary information to solve the problem, does not have the skills to search for information. <b>Удовлетворительно</b> The student is able to identify gaps in the necessary information to solve the problem, has poor skills in finding information necessary to eliminate gaps. <b>Хорошо</b> The student is able to identify gaps in the necessary information to solve the problem, has good skills in finding the information necessary

	reliable sources of information for carrying out the critical analysis of problem situations.	<p style="text-align: center;"><b>Хорошо</b></p> <p>to eliminate gaps. There are difficulties in finding solutions to the problem, eliminated after leading questions of the teacher.</p> <p style="text-align: center;"><b>Отлично</b></p> <p>The student is fully able to identify gaps in the necessary information to solve the problem, has the skills to search for information. Able to offer options to eliminate gaps.</p>
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### УК.3

#### Способен осуществлять коммуникации в рамках академического и профессионального взаимодействия на русском и иностранном языках

<b>Компетенция</b>	<b>Планируемые результаты обучения</b>	<b>Критерии оценивания результатов обучения</b>
<p><b>УК.3.3</b> Представляет результаты деятельности на публичных мероприятиях в устной и письменной формах</p>	<p>To know: requirements of bibliographic culture, methods and methods of analysis and generalization of information, methods and means necessary to create a presentation on the topic of work, terminological apparatus of the specialty. To be able: to carry out selection, study of modern scientific literature, to interpret experimental data, to present results of work in the form of the scientific publication and the report.</p> <p>To possess: skills in presenting results in a scientific publication, methods and techniques of analysis and presentation of scientific pharmaceutical information, skills to use information and communication technologies required to create a presentation on the topic.</p>	<p style="text-align: center;"><b>Неудовлетворительно</b></p> <p>The student is not able to present the results of the work orally and in writing. Does not possess methods and techniques of analysis and presentation of scientific pharmaceutical information, skills of using information and communication technologies necessary to create a presentation on the topic of work.</p> <p style="text-align: center;"><b>Удовлетворительно</b></p> <p>The student is able to present the results of the work in writing. He has poor knowledge of methods and techniques of analysis and presentation of scientific pharmaceutical information, skills of using information and communication technologies necessary to create a presentation on the topic of work. There are difficulties in preparing the report and presenting their work orally.</p> <p style="text-align: center;"><b>Хорошо</b></p> <p>The student is able to present the results of the work orally and in writing. Owns methods and techniques of analysis and presentation of scientific pharmaceutical information, skills of using information and communication technologies necessary to create a presentation on the topic of work. There are difficulties in the preparation of the report, eliminated after consultation with the teacher.</p> <p style="text-align: center;"><b>Отлично</b></p> <p>The student is fully able to present the results of the work orally and in writing. Does not possess methods and techniques of analysis and presentation of scientific pharmaceutical</p>

		<b>Отлично</b> information, skills of using information and communication technologies necessary to create a presentation on the topic of work.
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## УК.2

### Способен управлять проектом, организовывать и руководить работой команды

Компетенция	Планируемые результаты обучения	Критерии оценивания результатов обучения
<b>УК.2.3</b> Разрабатывает мероприятия по реализации проекта на разных этапах его жизненного цикла, вносит корректировки в ходе реализации проекта	<p>To know the main sources of modern scientific literature, the main characteristics of modern methods and techniques of data analysis.</p> <p>To be able: to carry out selection, study of modern scientific literature; to formulate the purposes and tasks of research; to form the conceptual apparatus of scientific research; to make the plan of research; to select methods and techniques of the analysis according to the purposes and tasks of research.</p> <p>To possess: skills of independent work with scientific literature; interpretation and presentation of results of scientific research; justification and approbation in practice of the results obtained in the course of research.</p>	<p><b>Неудовлетворительно</b> The student is not able to develop activities for the implementation of the project, to make adjustments in the course of its implementation.</p> <p><b>Удовлетворительно</b> The student is able to develop activities for the implementation of the project, based on knowledge of the main characteristics of modern methods and techniques of data analysis, has poor skills in interpreting and presenting the results of scientific research, there are serious difficulties with making adjustments in the course of its implementation.</p> <p><b>Хорошо</b> The student is able to develop activities for the implementation of the project, based on knowledge of the main characteristics of modern methods and techniques of data analysis, has the skills of interpreting and presenting the results of scientific research, justification and testing in practice the results obtained during the study. There are difficulties with making adjustments in the course of its implementation, eliminated after leading questions of the teacher.</p> <p><b>Отлично</b> The student is fully able to develop activities for the implementation of the project, based on knowledge of the main characteristics of modern methods and techniques of data analysis, has the skills of interpreting and presenting the results of scientific research, justification and testing in practice the results obtained during the study, make adjustments during its implementation.</p>

### Оценочные средства

Вид мероприятия промежуточной аттестации : Экзамен

Способ проведения мероприятия промежуточной аттестации : Защищаемое контрольное

мероприятие

**Продолжительность проведения мероприятия промежуточной аттестации :  
время отводимое на доклад 1**

**Показатели оценивания**

The student did not come to practice or did not issue a diary of practice and did not write a report.	<b>Неудовлетворительно</b>
The diary of practice and the report on it is issued not according to criteria, at protection of work the student does not answer the asked questions or refuses oral protection.	<b>Удовлетворительно</b>
The diary of practice and the report on it is issued according to criteria, but at protection of work the student answers not all asked questions.	<b>Хорошо</b>
The diary of practice and the report on it is issued according to criteria, at protection of work the student answers all asked questions.	<b>Отлично</b>