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**МИНИСТЕРСТВО НАУКИ И ВЫСШЕГО ОБРАЗОВАНИЯ
РОССИЙСКОЙ ФЕДЕРАЦИИ**
**Федеральное государственное автономное
образовательное учреждение высшего образования**
«СЕВЕРО-КАВКАЗСКИЙ ФЕДЕРАЛЬНЫЙ УНИВЕРСИТЕТ»
Пятигорский институт (филиал) СКФУ

Методические указания
по выполнению практических работ
по дисциплине
«ИНОСТРАННЫЙ ЯЗЫК В СФЕРЕ ПРОФЕССИОНАЛЬНОЙ КОММУНИКАЦИИ»
для студентов направления подготовки
08.03.01 Строительство

**ДОКУМЕНТ ПОДПИСАН
ЭЛЕКТРОННОЙ ПОДПИСЬЮ**
Сертификат: 12000002A633E3D113AD425FB50002000002A6
Владелец: Шебзухова Татьяна Александровна
Действителен: с 20.08.2021 по 20.08.2022

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**ДОКУМЕНТ ПОДПИСАН
ЭЛЕКТРОННОЙ ПОДПИСЬЮ**

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ВВЕДЕНИЕ

Дисциплина «Иностранный язык в сфере профессиональной коммуникации» ориентирована на

- развитие навыков понимания устной речи общей и профессиональной тематики, включая понимание речи носителей языка и восприятие речи с медиа-источников;
- понимание особенностей стилей общения в рамках деловых ситуаций и ситуаций повседневного общения;
- преодоление языкового барьера и улучшение навыков разговорного французского языка;
- повышение грамотности устной и письменной речи;
- расширение активного словарного запаса по тематике общего и делового французского языка;
- повышение общего уровня владения языком.

Таким образом, целью освоения дисциплины является формирование у студентов компетенций УК-4 как средства, позволяющего применять современные коммуникативные технологии, в том числе на иностранном(ых) языке(ах), для академического и профессионального взаимодействия.

Процесс изучения дисциплины направлен на формирование таких компетенций как: овладение монологической, диалогической и письменной речью; основами самооценки уровня сформированности языковой, речевой и социокультурной компетенции и формирования потребности языкового самообразования.

В результате освоения дисциплины обучающийся должен знать:

- лексику профессиональной направленности;
- нормы употребления лексики английского языка в профессиональной сфере;
- особенности грамматики профессионального английского языка;
- специфику иноязычной речевой культуры профессионального коллектива;
- особенности иноязычного речевого этикета;

уметь:

- осуществлять профессиональную коммуникацию в устной и письменной формах на английском языке;
- читать и переводить специальную литературу для пополнения профессиональных знаний;
- использовать этикетные формулы приветствия, прощания, просьбы в рамках коммуникации в иноязычном профессиональном коллективе;
- формулировать письменные обращения на иностранном языке;

владеть:

- навыками профессионального общения на английском языке;
- способами пополнения профессиональных знаний из оригинальных источников на английском языке;
- навыком использования норм иностранного языка в межличностном и профессиональном общении;
- навыком иноязычного взаимодействия в письменной форме.

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СОДЕРЖАНИЕ ПРАКТИЧЕСКИХ ЗАНЯТИЙ

СОДЕРЖАНИЕ ПРАКТИЧЕСКИХ ЗАНЯТИЙ

РАЗДЕЛ 1. FIELDS OF CIVIL AND INDUSTRIAL ENGINEERING /ОБЛАСТИ ГРАЖДАНСКОГО И ПРОМЫШЛЕННОГО СТРОИТЕЛЬСТВА

Практическое занятие №1.

Тема 1. From the History of Building/ История строительства.

Цель: Формирование коммуникативных компетенций, овладение лексикой и грамматикой

Знать:

- основные способы работы над языковым и речевым материалом;
- лексико-грамматический минимум в объеме, необходимом для работы с иноязычными текстами в процессе профессиональной деятельности;
- лексику профессиональной направленности;
- нормы употребления лексики английского языка в профессиональной сфере

Уметь:

- осуществлять профессиональную коммуникацию в устной и письменной формах на английском языке;
- читать и переводить специальную литературу для пополнения профессиональных знаний;
- изъясняться на бытовые и профессиональные темы; выступать публично (с предварительной подготовкой) с сообщениями и докладами;
- аннотировать, реферировать, переводить литературу по специальности на иностранном языке

Актуальность темы: обусловлена необходимостью овладением УК-4

Теоретическая часть:

dwel (dwelt)	жить, обитать, находиться, пребывать
cave	пещера
mud	грязь, слякоть; ил, тина
wood	дерево
stone	камень
find out	узнать, разузнать, выяснить; понять
brick	кирпич
dry	сухой; сушить
ancient	древний
discover	открывать
cut	резать; рубить, валить (лес)
erect	сооружать; воздвигать, строить (о здании)
temple	храм; церковь
tomb	могила; надгробие; мавзолей
commemorate	почтить память
huge	огромный
as well as	так же как, а также
pillar	столб, колонна; опора, стойка
support	опора; поддерживать, подпира́ть; нести нагрузку
bridge	мост
harbour	гавань; порт; прибежище, пристанище
basic	основной
kiln	печь для обжига и сушки
fire	обжигать (керамику, кирпичи и т.п.)
remain(s)	остатки, следы прошлого; оставаться
remind	напоминать
suggest	предлагать

dome

ДОКУМЕНТ ПОДПИСАН ЭЛЕКТРОННОЙ ПОДПИСЬЮ

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complete(ly)

заканчивать, завершать; полный; полностью

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lose (lost, lost)	терять, потеряться
fusion	интеграция, объединение, слияние
rest	лежать на; опираться
recent	недавний, последний
evidence	доказательство, подтверждение; свидетельство
hold together	сплавивать(ся)
trace back	выяснять происхождение, проследить
prove	доказывать; удостоверить
borrow	заимствовать
sample	образец, образчик, экземпляр
throughout	повсюду; на всем протяжении

From the history of building

Many thousands of years ago, there were no houses such as people live in today. In hot countries, people sometimes made their homes in the trees and used leaves to protect themselves from rain or sun. In colder countries, they dwelt in caves. Later people left their caves and trees and began to build houses out of different materials such as mud, wood or stones.

Later people found out that bricks made of mud and dried in the hot sunshine became almost as hard as stones. In Ancient Egypt especially, people learned to use these sun-dried mud bricks. Some of their buildings are still standing after several thousands of years. The Ancient Egyptians discovered how to cut stone for building purposes. They erected temples, palaces and huge tombs. The greatest tomb is the stone pyramid of Khufu, king of Egypt. The ancient Egyptians often erected their huge constructions to commemorate their kings or pharaohs.

The ancient Greeks also understood the art of building with cut stone, and their buildings were beautiful as well as useful. They often used pillars partly for supporting the roofs and partly for decoration. Parts of these ancient buildings can still be seen today in Greece.

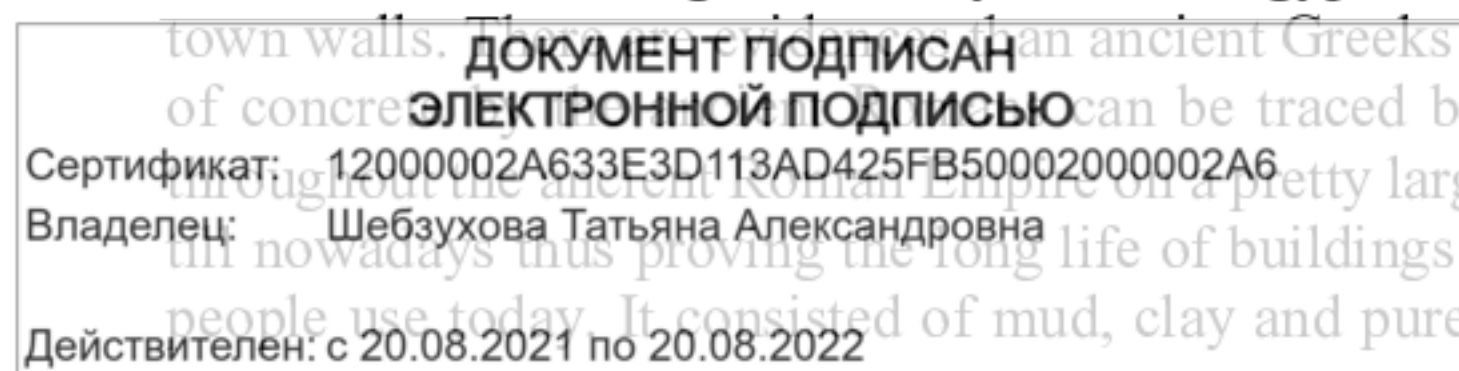
The Romans were great bridge, harbour and road builders. In road, work the Romans widely used timber piles. They also erected aqueducts, reservoirs, water tanks, etc. Some of their constructions are still used till now. It is known that the manufacture of lime is one of the oldest industries used by man. Lime is a basic building material used all over the world as today so in the ancient world. One of the Romans, Marcus Porcius Cato, gave an idea of a kiln for lime production: its shape and dimensions. Such kilns were fired with wood or coal and were extremely inefficient. There are still many remains of kilns in some places of Great Britain as well as roads and the famous Hadrian Wall, which was erected to protect Romans from the celtic tribes in the first century A.D. Britain was a province of the Roman Empire for about four centuries. There are many things today in Britain to remind the people of the Roman: towns, roads, wells and the words.

In a period of 800 to 900 years the Romans developed concrete to the position of the main structural material in the empire. It is surprising, therefore, that after the fall of the Empire, much of the great knowledge should have disappeared so completely. The knowledge of how to make durable concrete has been lost for centuries, but mention was made of it in the writings of architects from time to time. Fusion of Roman and North European traditions in construction was reflected in many ways. Buildings combined the Roman arch and the steep peaked roof of Northern Europe. Roman traditions were continued in the architectural form known as Romanesque. London Bridge, finished in 1209, took thirty-three years to build. It consisted of nineteen irregular pointed arches with its piers resting on broad foundation, which was designed to withstand the Thames current.

The Roman period was followed by other periods each of which produced its own type of architecture and building materials. During the last hundred years many new methods of building have been discovered. One of the recent discoveries is the usefulness of steel as a building material.

Nowadays when it is necessary to have a very tall building, the frame of it is first built in steel and then the building is completed in concrete. Concrete is an artificial kind of stone, much cheaper than brick or natural stone and much stronger than they are. The Egyptians employed it in the construction of bridges, roads and

town walls. The ancient Greeks also used concrete for the building purposes. The use of concrete can be traced back as far as 500 B.C. They were the first to use it on a pretty large scale and many structures made of concrete remain made of concrete. Of course, it was not the concrete alone, which were used to hold together the roughly



broken stone in foundations and walls. It was so-called “pseudo-concrete”. The idea of such building material might have been borrowed from the ancient Greeks as some samples of it were found in the ruins of Pompeii.

Вопросы и задания:

Exercise 1. Прочитайте, переведите следующие предложения и отметьте, какие из них относятся к египетскому, греческому и римскому искусствам строительства в древности.

1. They first used sun-dried mud bricks for building.
2. In a period of 800-900 they developed concrete to the position of main structural material.
3. Their buildings were beautiful as well as useful.
4. They learned how to cut stone for building purposes.
5. They often used pillars partly for supporting the roofs and partly for decoration.
6. They used concrete for construction of bridges roads and town walls.
7. First kilns for lime production appeared in this country.
8. In ancient times concrete for building purposes was first used in this country.
9. They erected their huge constructions to commemorate their kings.
10. They were great bridge and road builders in old times.

Exercise 2. Закончите следующие предложения в соответствии с текстом. Предложения переведите на русский язык.

1. Many thousands of years ago there were no houses ...
2. In hot countries people made their homes ...
3. In colder countries they ...
4. In ancient time kilns for lime production were fired by ...
5. The knowledge of how to make durable concrete ... for centuries.
6. After the Fall of the Roman Empire Roman traditions were continued ...
7. Buildings combined the Roman arch and ...
8. During the last hundred years many methods of building....
9. One of the most recent discoveries is ...
10. Nowadays the frame of a tall building is first ... and then ...

Exercise 3. Закончите следующие предложения, используя английские эквиваленты из текста в соответствии с текстом. Предложения переведите на русский язык.

1. Concrete is an artificial kind of stone, намного дешевле и прочнее, than brick or natural stone.
2. The Egyptians used concrete для строительства мостов, дорог и городских стен.
3. Существуют доказательства that ancient Greeks also used concrete in building purposes.
4. The use of concrete by the ancient Romans может быть прослежен еще в 500 году до нашей эры).
5. They were the first to use it throughout the ancient Roman Empire в довольно широких масштабах.
6. Concrete in old times consisted of mud, глины, чистой извести и грубого (неровного) щебня.
7. London Bridge finished in 1209 was designed on broad foundation (чтобы противостоять течению Темзы).

Практическое занятие №2.

Тема 2. “Engineering and Its Present Status” / Строительство и его современное состояние.

Цель: Формирование коммуникативных компетенций, овладение лексикой и грамматикой

Знать:

- основные способы работы над языковым и речевым материалом;
- лексико-грамматический минимум в объеме, необходимом для работы с иноязычными текстами в процессе профессиональной деятельности;
- лексику профессиональной направленности;
- нормы употребления лексики английского языка в профессиональной сфере

Уметь:

- осуществлять **ДОКУМЕНТ ПОДПИСАН ЭЛЕКТРОННОЙ ПОДПИСЬЮ** коммуникацию в устной и письменной формах на английском языке;

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- читать и переводить специальную литературу для пополнения профессиональных знаний;

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- изъясняться на бытовые и профессиональные темы; выступать публично (с предварительной подготовкой) с сообщениями и докладами;
 - аннотировать, реферировать, переводить литературу по специальности на иностранном языке
- Актуальность темы:** обусловлена необходимостью овладением УК-4

Теоретическая часть:

Vocabulary

1. to shape, v - принимать форму
2. to fit, v - устанавливать
3. to stand up v - выдерживать
4. to break v - разрушать
5. to catch fire v - загореться
6. to define v - определять
7. to deal with, v – иметь дело с
8. to lay the foundation, v – закладывать фундамент
9. to enable v - давать возможность
10. execution n - выполнение
11. engineering techniques, n – технические средства
12. factual approach, n – фактический подход
13. strikingly adv - удивительно
14. bulk of engineering, n- объём инженерного искусства
15. to allow v - предоставлять
16. off-the-shelf approach, n – стандартный подход
17. to customize v - выполнять по индивидуальному заказу
18. technical design, n - техническое проектирование
19. environmental compliance, n - соответствие с окружающей средой
20. diversity n - разнообразие
21. affinity n - близость
22. creative adj - творческий
23. to expect v - ожидать
24. tailored adj - приспособленный
25. selective adj – избирательный

“Engineering and Its Present Status”

Engineering is the art and science by which the properties of matter and energy are made useful to man in structures, machines and products. The basis of engineering is knowledge of the materials used, knowledge of how they are made, how they are shaped, how you fit them together, how they stand up to stress, how they break and how they catch fire. Civil engineering is defined as that phase of engineering which deals with the planning, design and construction of projects.

The branch of civil engineering provides for the initial development of natural resources and lay the foundation for other technical progress.

There are greatest opportunities today for civil engineers in construction than at any previous time in the history of our country. These opportunities enable engineer to take a basic part in the conception design and execution of problems which are essential to the growth, development and defense of our country.

The application of engineering techniques to construction makes civil engineering the only factual approach to construction problems.

Engineering is a constantly changing and developing profession. Invention, the adoption of some strikingly new device, method or technique play a part in this continuing evolution. But the great bulk of engineering consists in doing better something that has been done many times before.

Engineering works have been built for the use and convenience of man.

They mark the increasing mastery of man over nature, which has made possible our continuing progress toward a better life.

Engineering is different from those 10-15 years ago when stable business structures allowed only a limited technical design.

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diversity reflecting a closer understanding of the market and affinity to the needs of society.

Engineering becomes a very creative profession and global markets today demand creativity.

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The most creative and elegant engineering solutions are expected from the engineer combining his knowledge of technology with the demands of business, economics and people. The need to develop products and services faster, cheaper and better than ever before is obvious.

Customers are more selective and require production tailored for specific needs, delivered quickly and anywhere with no reduction in quality.

Builders have constructed the tallest, longest, largest and deepest structures in history.

As a result, mankind in the 21st century is better off with the proper food, sanitation, housing and all material comforts which modern science, engineering and industry can provide.

Вопросы и задания:

Exercise 1. Choose the correct word from the two words given in brackets.

1. Engineering is the art and science by which the properties of matter and energy are made (useless, useful) for man in structures and products.
2. The basis of engineering is (knowledge, skill) of the materials used, their properties and mathematics.
3. Civil engineering deals with (destruction, construction) of various projects.
4. Engineering (works, tasks) have been built for the use and convenience of man.
5. Engineering is a (temporary, constantly) changing and developing profession.
6. There are (more, less) opportunities today for civil engineering in construction than before.
7. Engineering works mark the (increasing, decreasing) mastery of man over nature.
8. Global markets demand (creativity, novelty).
9. The need to develop products faster, cheaper and better is (obvious, premature).
10. (Much, little) is expected of the builders and designers in the future.

Exercise 2. Put the words in brackets in the correct form.

1. She is ... (little) experienced than her friends.
2. Do you think ... (the same as) other members of your group?
3. This article is ... (much difficult) than the previous one.
4. Oxford is one of the ... (old) and (famous) universities in the world.
5. The ... (hard) you work, the (good) the result will be.
6. This problem was ... (little interesting) than I expected.
7. My flat isn't ... big ... yours.
8. That building will be ... (high) in our district.
9. Research opportunities are ... (much wide) today than before.

Exercise 3. Match the words and their definitions.

1. to shape a. particular, certain needs
2. design b. the work of building
3. to deal with c. to make the form of something
4. affinity d. to do business or connection
5. construction e. close likeness or connection
6. approach f. a drawing showing how something is to be made
7. specific needs g. a manner or method of doing something

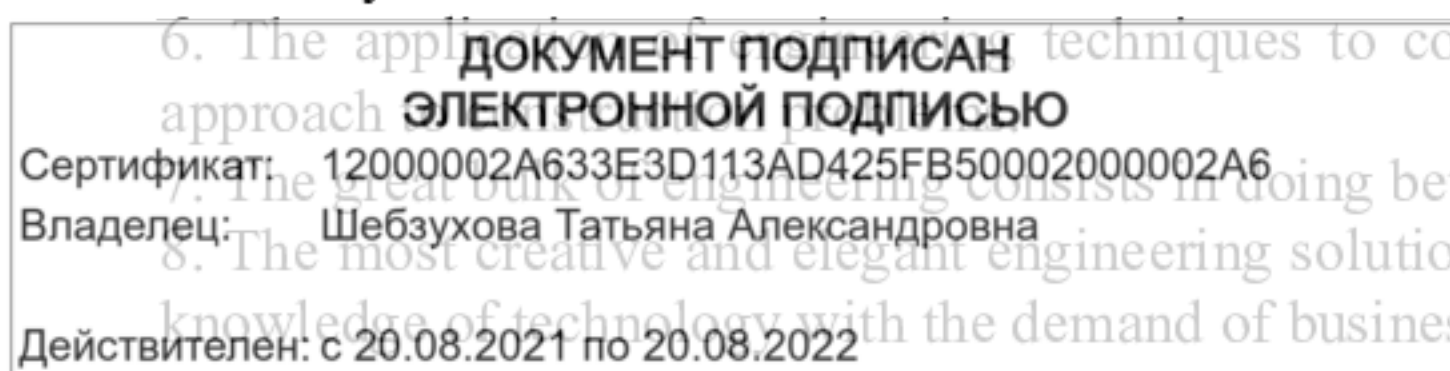
Exercise 4. Translate the following sentences into Russian.

1. Civil engineering is defined as that phase of engineering which deals with the planning, design and construction of projects.
2. The branch of civil engineering provides for the initial development of natural resources and lays the foundation for other technical progress.
3. Engineering is a constantly changing and developing profession.
4. Engineering works have been built for the use and convenience of man.
5. Builders have constructed the tallest, strongest, largest and deepest structures in history.

6. The application of modern techniques to construction makes civil engineering the only factual approach.

7. The great bulk of engineering consists in doing better something that has been done many times before.

8. The most creative and elegant engineering solutions are expected from the engineer who combines his knowledge of technology with the demand of business, economics and people.



9. Customers are more selective now and require production tailored for specific needs, delivered quickly and anywhere with no reduction in quality.

Exercise 5. Do you agree or disagree with the following opinion?

Use the given phrases:

Yes, I think so I don't think so

I certainly agree with you I doubt it

I am sure you are right I disagree (with you)

1. There are less opportunities today for civil engineers in construction than before.
2. The basis of engineering is knowledge of materials used and mathematics.
3. Civil engineering never dealt with planning, design or construction of various projects.
4. Present designs are very simple but interesting.
5. Engineering tasks nowadays are practically the same as 10 - 15 years ago.
6. Our cities should be comfortable and beautiful.
7. The type and style of dwellings in urban areas depend on natural conditions and local traditions.
8. The problem of the house is the problem of the epoch.
9. People and buildings require sunlight and air.
10. New housing is characterized by the wide expense of glazing and the development of public services and communication.

Практическое занятие №3.

Тема 3. New projects: the architect-engineer-contractor team / Новый проект: Команда архитектор-инженер -подрядчик.

Цель: Формирование коммуникативных компетенций, овладение лексикой и грамматикой

Знать:

- основные способы работы над языковым и речевым материалом;
- лексико-грамматический минимум в объеме, необходимом для работы с иноязычными текстами в процессе профессиональной деятельности;
- лексику профессиональной направленности;
- нормы употребления лексики английского языка в профессиональной сфере

Уметь:

- осуществлять профессиональную коммуникацию в устной и письменной формах на английском языке;
- читать и переводить специальную литературу для пополнения профессиональных знаний;
- изъясняться на бытовые и профессиональные темы; выступать публично (с предварительной подготовкой) с сообщениями и докладами;
- аннотировать, реферировать, переводить литературу по специальности на иностранном языке

Актуальность темы: обусловлена необходимостью овладением УК-4

Теоретическая часть:

- 1.team n –бригада, команда
- 2.to interrelate v -взаимодействовать
- 3.triple -тройной
- 4.triangel n -треугольник
5. objective, n = aim, n -цель
6. in spite of, prep –несмотря на
7. to accept v -принимать
8. particular adj -частный
9. discerning adj -проницательный

15. magnitude n -важность
- 16 to cultivate v -
культивировать, поощрять

17. final decision, n -
Окончательное решение
18. estimate n -
смета
19. structural engineer, n -
инженер-проектировщик
20. to be aware of, v -
знать, сознавать
21. owner, n -

10.to exist v -существовать
11.mutual adj -взаимный
12.outstanding success, n –выдающийся успех
13. to coordinate v -координировать
14. to achieve v -достигать

**ДОКУМЕНТ ПОДПИСАН
ЭЛЕКТРОННОЙ ПОДПИСЬЮ**
Сертификат: 12000002A633E3D113AD425FB50002000002A6
Владелец: Шебзухова Татьяна Александровна
Действителен: с 20.08.2021 по 20.08.2022

владелец, собственник
22. to secure v -
обеспечивать
23. to suggest v -
предлагать

24. schedule n -
график
25. target n -
задача

“New projects: the architect-engineer-contractor team”.

1 Nearly two thousand years ago the Roman architect Vitruvius listed three basic factors in architecture - convenience, strength and beauty.

These factors are actual today. They are always present and are always interrelated in the best structures.

2 The architect, the engineer and the contractor form parts of a triangle all of which are essential to the completion of a construction project. Together they are working towards the same objective - better construction, better materials, and better design.

In spite of the increased cost of today's buildings as compared with those of

10 years ago, no one would accept a new structure of the older type of design and construction.

One aim, one responsibility, one striking result. The activity of the engineer and the architect in design and construction is of particular interest.

Between competent and discerning practitioners of both professions there exists and should exist a mutual respect for their individual abilities.

In fact, no important building project has been an outstanding success without the respective training experience and skill of engineers and architects coordinated towards a common result.

3 The chief function of the architect is to solve a particular problem of construction in such a way as to achieve a structure or structures with proper and harmonious balance of utility, strength, beauty and economy. If the project is of any magnitude, the conception takes material form through the skill of the engineer.

In such project the engineer must depend on the planning and skill of the architect; the architect - on the construction skill of the engineer. Thus, engineers and architects can cultivate the mutual respect, which will develop the harmony and solidarity of basic professions. In most cases it is the architect who must make the final decisions based on the contractor's estimates of cost, his faith in the structural engineer and his willingness to take a chance with new construction methods. First, the structural engineer must become aware of new developments, must learn how to design the new structure, know the cost of construction and be aware of the esthetic problems of the architect. Then he must suggest structures to the architect talk with the contractor about them and find their advantages and disadvantages.

The following steps are usually taken in putting up a building. The owner, be it a corporation, bank or individual, feels the need for a new building and secures a site. These two fundamental decisions what is to build and where to build are made by the owner, sometimes with architectural or engineering advice.

Then the contractor plans the site layout, prepares the project program, schedules and targets.

The engineer in his turn controls the quality of his structure in two ways – by the specifications he writes into the contract and by the inspection he maintains during construction. These two factors have a significant effect on the productivity of the contractor's organization.

5 As a result of the combined efforts of the engineer, the architect and the contractor, new forms and new methods of construction are developed and three main aims - economic, esthetic and technical, single or in combination, are successfully realized in spectacular building by the architect, the engineer and the contractor, each of which has contributed to this development.

Вопросы и задания.

Exercise 1 Find the English equivalents to the following word combinations in the text.

Три основных фактора; образовывать части треугольника; завершение
строительного объекта; одна цель; взаимоуважение; деятельность
инженера и архитектора; прочность; красота и экономия; компетентный
практик; мастерство инженера; новые формы;

подрядчик; проектировать; знать, как проектировать;

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Владелец: Шебзухова Татьяна Александровна

Exercise 2 Write in the number of the paragraph that deals with the following topics:

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- деятельность инженера и архитектора
- стадии возведения здания
- появление новых форм и методов строительства

Exercise 3 Scanning means looking for special information in the text. Scan the text to find information on the following topics:

- the chief function of the architect
- the work of the structural engineer
- the result of the combined efforts of the team
- the formula of the success to be remembered.

Exercise 4. Choose the key sentence from each paragraph.

1. Vitruvius listed three basic factors in architecture - convenience, strength and beauty.

2.

3.

4.

5.

Exercise 5. Answer the following questions.

1. By what geometric figure can you express the interdependence in the work of competent practitioners?

a square – квадрат

a circle – круг

a triangle– треугольник

a rhomb - ромб

2. What is your opinion about new projects in Voronezh?

3. Enumerate some of the most interesting projects.

4. How do you appreciate the work of the architect, the engineer and the contractor?

5. What contribution are you going to make when you become a civil engineer?

6. Think of your own questions concerning new projects in Voronezh.

7. What are their advantages and disadvantages?

Практическое занятие №4.

Тема 4. Some Basic Problems in Construction / Основные проблемы в строительстве.

Цель: Формирование коммуникативных компетенций, овладение лексикой и грамматикой

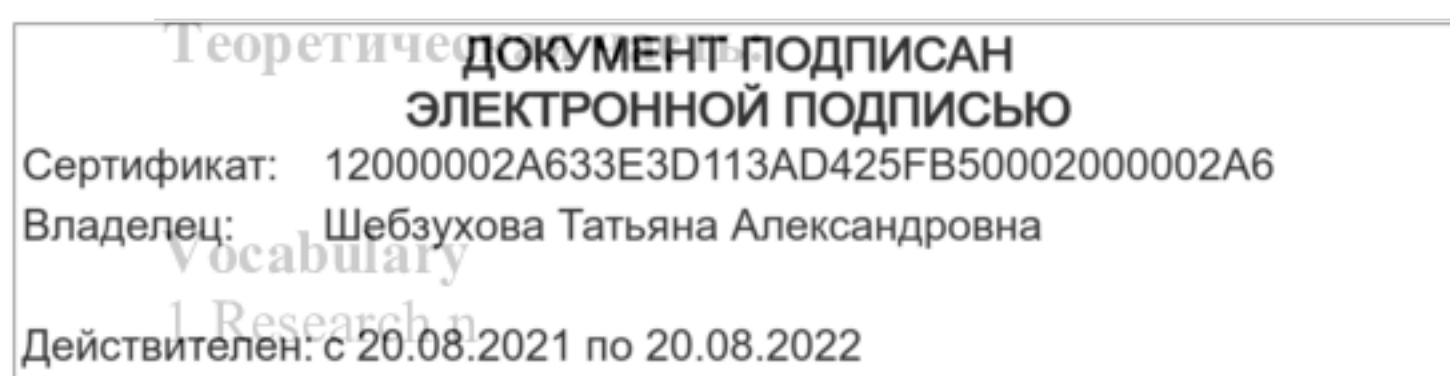
Знать:

- основные способы работы над языковым и речевым материалом;
- лексико-грамматический минимум в объеме, необходимом для работы с иноязычными текстами в процессе профессиональной деятельности;
- лексику профессиональной направленности;
- нормы употребления лексики английского языка в профессиональной сфере

Уметь:

- осуществлять профессиональную коммуникацию в устной и письменной формах на английском языке;
- читать и переводить специальную литературу для пополнения профессиональных знаний;
- изъясняться на бытовые и профессиональные темы; выступать публично (с предварительной подготовкой) с сообщениями и докладами;
- аннотировать, реферировать, переводить литературу по специальности на иностранном языке

Актуальность темы: обусловлена необходимостью овладением УК-4



научное исследование
2. Not to keep pace with, v

Не отставать от
 3 .engineering problems, n
 строительные проблемы
 4.behavior n
 поведение
 5. Service conditions, n
 Условия эксплуатации
 6. to provide for v
 обеспечивать
 7. crack n трещина
 8. shrinkage n
 усадка
 9. plain adj
 неармированный
 10. reinforced adj
 армированный
 11. cast-in-place монолитный
 12. structural materials, n
 конструкционные материалы
 13.precast adj сборный
 14.prestressed adj преднапряженный
 15.flexibility n гибкость
 16. opportunity n возможность

17.investigation исследование
 18.conception понимание, понятие
 19. composite construction, n
 Составная конструкция
 20. to reduce v
 уменьшать
 21 .to handle v доставлять
 22.productivity-производительность
 23. delivery n
 поставка
 24. working operations, n
 Производственные операции
 25.supervision n надзор
 26.schedule n график
 27.job site, n
 строительная площадка
 28. employment n работа, занятость
 29. indispensable adj необходимый
 30. staff n штат, персонал
 31. to assume v брать
 32. function n функция

“Some Basic Problems in Construction”

However, civil engineering has solved many problems; problems demanding an engineering solution remain in construction.

The need for research. Without research, modern industry could not keep pace with the ever-changing demands for new materials, greater economy and faster operations. It is research that has helped in the solution of many engineering problems. Only research gives the answers to the problem of behaviour of structures under service conditions and provides detail information for design purposes.

Subjects for research in construction may include concrete cracks, the creep and shrinkage characteristics of concrete, deep foundations, methods of restressing, etc.

Site investigations are needed as a basis for the preparation of plans for a given project. They provide the information for economical design of foundations for buildings.

Soil stabilization is also of great importance for engineers.

Building materials. Of the various structural materials concrete plain or reinforced, cast-in-place, precast or prestressed is the material most favored by architects and engineers for structures to show all the technical and economic advantages. They are: flexibility in design, speed of construction, structural strength.

New methods in prestressed concrete construction offer the greatest opportunities for further investigation, new conceptions and new forms.

Composite construction. A popular and excellent form of construction is that using a prestressed concrete unit combined with an in-situ top. By this means the amount of prestressed concrete is reduced, handling problems are simplified.

This type of construction has become standard for bridges and house - building.

Productivity in construction depends upon many factors. They include important areas of construction activity, the design of structures, the schedule of deliveries and the working operations, the supervision of work, the flow of materials to job site and the skill of the workers.

The market for the services of the construction industry is widening. The increasing productivity lowers costs and provides for more employment for construction and working trades.

Specialists. Today the majority of construction firms have qualified and competent engineers on their staff if their operations are to be carried out efficiently and economically. Engineering operations are varied and

extensive.
 Men of all competence may be required to perform engineering activities. The work
 of a draftsman, a toolmaker, a plant operator is indispensable but does not require the imagination.
 Specialists take decisions and assume responsibilities for the result.
 Engineers do have their problems and solve them in the most economical and safest way.

ДОКУМЕНТ ПОДПИСАН
 ЭЛЕКТРОННОЙ ПОДПИСЬЮ
 Сертификат: 12000002A633E3D113AD425FB50002000002A6
 Владелец: Шебзухова Татьяна Александровна
 Действителен: с 20.08.2021 по 20.08.2022

The more knowledge specialists have of different materials and of the functions to which they put structures, the better buildings will be.

Вопросы и задания:

Exercise 1 Match the following words and word combinations from two columns.

- | | |
|-------------------------|-------------------------------|
| 1. structural material | a. условия эксплуатации |
| 2. construction project | b. новые методы |
| 3. productivity | c. возможности |
| 4. new methods | d. строительный объект |
| 5. opportunities | e. экономическое преимущество |
| 6. service conditions | f. конструкционные материалы |
| 7. economic advantage | g. производительность |

Exercise 2. Translate the following sentences into English.

1. Проблемы, требующие технического решения, ещё остаются в строительстве.
2. Только научное исследование даёт ответы о поведении сооружений в условиях эксплуатации.
3. Строительные операции разнообразны и многочисленны.
4. Преднапряжённый бетон предлагает огромные возможности для дальнейшего исследования и новых форм.
5. Многие фирмы имеют компетентных специалистов для реализации смелых замыслов.
6. Специалисты принимают решения и несут ответственность за результат.
7. Производительность в строительстве зависит от многих факторов.
8. Это – проектирование сооружений, графики поставок материалов, контроль над выполнением производственных операций.
9. Темами для научного исследования могут быть усадочные трещины, методы предварительного напряжения арматуры, фундаменты глубокого заложения.

Exercise 3. Answer the following questions.

1. What is the text about?
2. Why is research so important for construction?
3. What methods of construction do you know?
4. What are the most important problems in construction?
5. Speak about structural materials.
6. What factors does the productivity of construction depend on?
7. What is the role of specialists in construction?
8. What do builders do?
9. What do they need for qualified work?
10. What municipal projects do you think are really worthy of admiration in Voronezh?

Практическое занятие №5.

Тема 5. Roofs: Types and Parts / Крыши: виды крыш и их части

Цель: Формирование коммуникативных компетенций, овладение лексикой и грамматикой

Знать:

- основные способы работы над языковым и речевым материалом;
- лексико-грамматический минимум в объеме, необходимом для работы с иноязычными текстами в процессе профессиональной деятельности;
- лексику профессиональной направленности;
- нормы употребления лексики английского языка в профессиональной сфере

Уметь:

- осуществлять профессиональную коммуникацию в устной и письменной формах на английском языке;

- читать и понимать документальную литературу для пополнения профессиональных знаний;

- извлекать из профессиональных текстов необходимую информацию; выступать публично (с предварительной подготовкой) с сообщениями и докладами;

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Владелец: Шебзухова Татьяна Александровна

- аннотировать, реферировать, переводить литературу по специальности на иностранном языке

Актуальность темы обусловлена необходимостью овладения УК-4

Действителен: с 20.08.2021 по 20.08.2022

Теоретическая часть:

7. Find suitable meaning of Russian words. Explain them in English

навес	topmost
скат	enclosed
огороженный	inclination
расположенный впритык	steeply-pitched
выскакивать	span
наклон, уклон	pitch
контрфорс, упор	governed
наивысший верхний	milder
крутой скат	lean-to
строительная крыша с затяжкой	shed
односкатный	slope
стропило	rafter
балка, перекладина	butting
скат, уклон	ridge piece
позволять	abutment
ригель	afford
регулироваться	couple-close
придавать жесткость	thrust out
умереннее	joist
прогон, обрешетка	collar
пролет	scantling
брус	purlin
	stiffen

8. Compose correct word combinations from both columns. Try to guess their meaning

lean –to	roof
shed	
couple	
couple-close	
collar	
double rafter	
purlin	
steeply-pitched	
flat	

9. Read the text. Find words characterizing types of roofs

Roof

A roof is the topmost part of a building. It is a covering 'constructed over the enclosed space to keep out rain and wind and to preserve the interior from exposure to weather. A roof must be well framed, strong enough to resist winds and sustain snow loads, and serve as insulation to prevent transmission of heat. They should tie the walls and give strength and firmness to the structure.

Roofs are now built varying in inclination from the nearly horizontal to the steeply-pitched. The flat roofs are often used in buildings of cities not only as coverings but for play-grounds, tea-gardens, and such purposes, but in buildings where slates, tiles or stone slabs form the roof covering, the pitch should

never be less than one-fifth of the span.

For the inclination of the roof is made as flat as possible for the purpose of economising the timber and covering material.

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Владелец: Шебзухова Татьяна Александровна

Действителен: с 20.08.2021 по 20.08.2022

The pitch of roof is governed, first by climatic conditions, secondly by the covering material used and by architectural requirements. For any given covering the milder the climate the flatter the pitch that may be given to the roof.

There are numerous forms among the wooden roofs, namely:

Lean-to or shed roofs are roofs formed with one slope only, and used for outhouses and for sheds.

Couple roofs are roofs composed of rafters with their feet fixed to wall plates, with their heads butting against a ridge piece; there is no tie, they depend for their stability upon the abutment afforded by the walls.

Couple-close roofs- for roofs about 12 feet in span; ties are used to prevent the walls being thrust out by the rafters. The ties are usually formed by fixing the ends of the ceiling joists to the feet of the rafters.

Collar roofs-in this type each pair of rafters has a collar, a scantling similar to the rafters fixed about half-way up the slope of the rafters. This tends to prevent the spread of the rafters, but it also subjects the rafters to considerable bending stress, which is at a maximum at the point where the collar is attached to the rafter.

Double rafter or Purlin roofs-Where the rafters exceed 8 feet in length it is more economical to introduce purlins than to employ scantling of an area greater than 2 in 4 in. The purlins lie together and greatly stiffen the rafters.

Tasks after reading:

10. Choose correct titles to paragraphs. Add necessary sentences. Put them in order

1. Conditions and requirements for type of roof's pitch. 2. Characteristics of roofs. 3. This type is formed with one slope. 4. This tends to prevent the spread of the rafters. 5. Purpose of the inclination.

11. Finish these statements choosing the correct variant. Prove your opinion

1. A roof is constructed over the enclosed space...
 - a) to be well framed
 - b) to be built varying in inclination
 - c) to give strength to the structure.
2. The flat roofs are often used...
 - a) for covering
 - b) for leisure
 - c) to be less than span
3. The inclination of the roof is made...
 - a) less than 1/4 of the span
 - b) the pitch
 - c) flat to economize materials.
4. Shed roofs are formed...
 - a) with one slope
 - b) 12 feet in span
 - c) to introduce purlines
5. Couple roofs are composed...
 - a) depending for stability upon the abutment
 - b) by fixing the ends of the ceiling
 - c) for outhouses
6. Collar roofs...
 - a) exceed 8 feet in length
 - b) prevent the spread of the rafter
 - c) fix their feet to wall plates
7. Couple-close roofs are used...
 - a) to considerable bending stress
 - b) to stiffen the rafters
 - c) to prevent thrusting out walls
8. Purlin roofs
 - a) stiffen the rafters
 - b) butt against a ridge piece
 - c) do not tie

12. Using information from the previous ex. speak briefly about all types of roofs.

Практический документ	
ДОКУМЕНТ ПОДПИСАН	
ЭЛЕКТРОННОЙ ПОДПИСЬЮ	
Сертификат:	12000002A633E3D113AD425FB50002000002A6
Владелец:	Шебзухова Татьяна Александровна
Цель: Формирование коммуникативных компетенций, овладение лексикой и грамматикой	
Значение: Знает	
Действителен: с 20.08.2021 по 20.08.2022	

- основные способы работы над языковым и речевым материалом;
- лексико-грамматический минимум в объеме, необходимом для работы с иноязычными текстами в процессе профессиональной деятельности;
- лексику профессиональной направленности;
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Уметь:

- осуществлять профессиональную коммуникацию в устной и письменной формах на английском языке;
- читать и переводить специальную литературу для пополнения профессиональных знаний;
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- аннотировать, реферировать, переводить литературу по специальности на иностранном языке

Актуальность темы: обусловлена необходимостью овладением УК-4

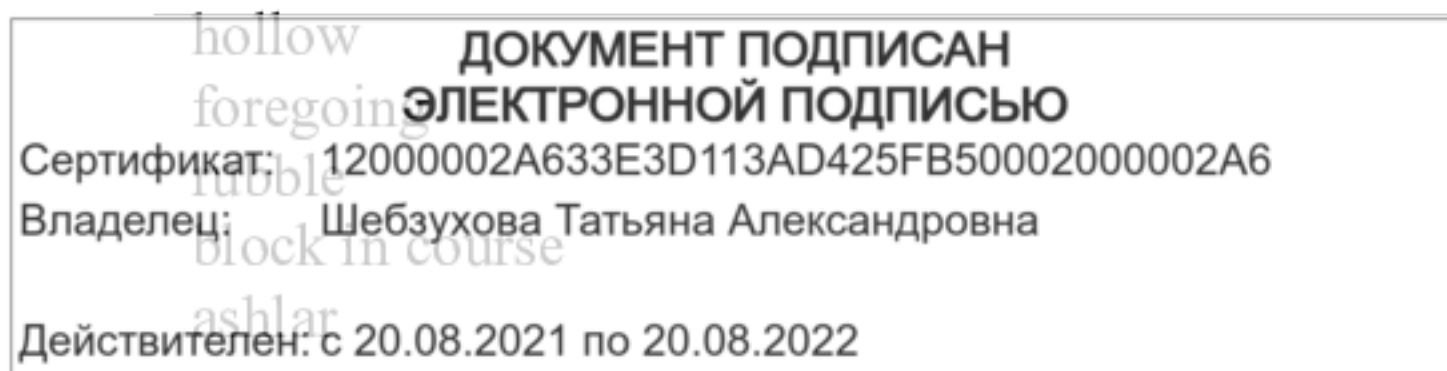
Теоретическая часть:

Define correct translation to English words. Explain their meaning

oblique	давление, упор
thrust	удерживающий
solid	саман
hollow	случайный
girder	пустой, полый
truss	прежде упомянутый
partition	блочная кладка
retaining	кладка из облицовочного камня
foregoing	обработанный
cane	окалывающий
adobe	пустотный
rubble	наклонный косо
block in course	прут, стержень
ashlar	сплошной, твердый
thinly-bedded	распиленный
random	перегородка
scabbling	бутовая (каменная) кладка
sawn	штукатурка
wrought	ригель, балка
rod	тонкослоистый
woven wire	сварочный
shear	поперечная сила
cavity	ячейка
cubicle	ферма, рама
sawdust	древесно-волокнистый
plaster	тростник
wood wool	витая проволока
dressed	древесные опилки

14. Compose correct word combinations from both columns. Try to guess their meaning

oblique	wall
solid	material
hollow	stone
foregoing	thrust
rubble	hammer
block in course	brick work
ashlar	concrete



thinly-bedded
scabbling
reinforced
cavity
partinion
sawdust
wood-wool
asbestos

15. Read the text. Find words characterizing all kinds of walls

Walls

Walls are constructed to enclose areas and to support the weight of floors, roofs, earth or water. They are classified as follows:

- a) walls to resist vertical pressures,
- b) walls to resist oblique thrusts.

The first section of heading includes all house walls, solid or hollow, supporting single floors, and couple close rafted roofs. The second section includes all walls carrying the girders of framed floors and the trusses of framed roofs. Inside walls serve as partitions or divisions for several rooms inside the dwelling. Inside walls may or may not support other parts of the structure.

An outside wall rests directly on the foundation wall forming a bearing unit for the upper floors and the roof and an enclosure for entire inner construction. Outside walls are made of wood, steel (for retaining walls), brick, stone, concrete blocks or concrete, or combination of two or three of the foregoing materials, cane and adobe.

Classification of Stone Walling.— This is classified as follows:

- 1) Rubble.
- 2) Block-in-Course.
- 3) Ashlar.

Rubble walls are those built of thinly-bedded stone, generally under 9 inches in depth, of irregular shapes as in common or random rubble, or squared as in coursed rubble.

Block-in-Course is composed of squared stones usually larger than coursed rubble, and under 12 inches in depth.

Ashlar is the stone from 12 to 18 inches deep, dressed with a scabbling hammer, or sawn to blocks of given dimensions and carefully worked to obtain fine joints.

Reinforced Brickwork.—It is brickwork which- has been strengthened by the introduction of steel or wrought iron in the form of either flat or rod bars, woven wire or expanded metal. Such brickwork is capable of resisting tensile and shear stresses, in addition to compressive stress.

Cavity Walls.—This type of construction is now very common and is generally preferred to solid wall construction for many types of buildings, especially houses. A cavity wall is usually an external wall. It consists of two separate walls of brickwork, having a cavity between, and connected together by metal ties.

Partitions are walls which are used to divide buildings into rooms, corridors and cubicles. They also often act as deep trusses to support the joists of floors, purlins and ceiling joists of roofs, etc. Partitions may be classified under following: timber, clay and terra-cotta, concrete, sawdust concrete, plaster, wood-wool cement, asbestos-cement, and metal.

Tasks after reading:

16. Answer following questions to the text:

1. Explain the purpose of construction walls.
2. How are walls classified?
3. What does this devision mean?
4. What are the differences between inside and outside walls?
5. What is classification of stone walling?

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ЭЛЕКТРОННОЙ ПОДПИСЬЮ
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Definitions

of the certain type of metal in the form of bars, wire etc

a) cavity b) rubble c) reinforced brickwork

2. It is built of thinly-bedded stone

a) rubble b) partition c) ashlar

3. It consists of two separate walls with a cavity in the middle

a) ashlar b) block-in-course c) cavity

4. It is composed of squared stones

a) partition b) block incourse c) ashlar

5. They are used as deep trusses for supporting parts of a building

a) cavity b) partition c) rubble

18. Discuss with your group mates peculiarities of all types of walls ,positives and negatives for the certain kind of building and its parts

Read the text.

Walls

A wall is a continuous, usually vertical structure, which is thin relative to its length and height. External walls help to provide shelter from our environment and internal walls divide buildings into rooms or compartments. The main function of an external wall is to provide shelter against wind, rain and the daily and seasonal variations of outside temperature normal to its location, for reasonable indoor comfort. To provide adequate shelter a wall should have sufficient strength and stability to be self-supporting and also to support roofs and upper floors. The terms loadbearing and non-loadbearing are used to differentiate the structural requirements of those walls that carry the loads from roofs and upper floors in addition to their own weight from those that are freestanding and carry only their own weight. The majority of walls for single, double and triple storey buildings are constructed with loadbearing masonry walls or are framed from timber, steel or concrete. The type of wall used will generally depend on the availability of materials and labour, economic factors and the design approach. The function of a wall is to enclose and protect a building or to divide space within a building. It is convenient to adopt a list of specific requirements to provide a check that a particular wall construction satisfies these requirements.

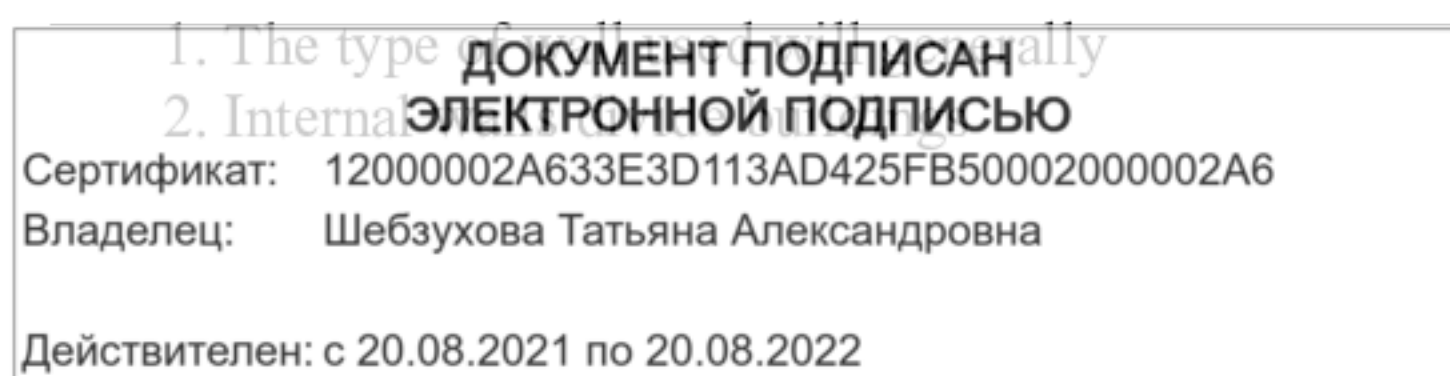
Вопросы и задания:

Задание 1. Переведите на русский язык и выучите следующие слова: continuous, vertical, thin, length, height, external, internal, environment, to divide, indoor, adequate, sufficient, self-supporting, requirement, enclose, resistance, carry, security, loadbearing, non-loadbearing

Задание 2. Найдите в правой колонке русские эквиваленты английских слов и словосочетаний.

- | | |
|--------------------|-----------------------|
| 1. divide. | a. Надежность |
| 2. sufficient | b. ограждать |
| 3. continuous | c. домашний |
| 4. self-supporting | d. делить, разделять |
| 5. indoor | e. окружающая среда |
| 6. requirement | f. внутренний |
| 7. height | g. соответствующий |
| 8. enclose | h. внешний |
| 9. security | i. самонесущие |
| 10. environment | j. достаточный |
| 11. adequate | k. выдерживать, нести |

Задание 3. Составьте предложения из двух, подходящих по смыслу частей и переведите предложения на русский язык.



- a. to divide space within a building.
b. are constructed with loadbearing masonry walls or are framed from timber, steel or concrete.
3. The terms loadbearing and nonloadbearing are used

- | | |
|-----------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| 4. A wall is a continuous, usually vertical structure, which is | c. to enclose and protect a building. |
| 5. The function of a wall is | d. against wind, rain and the daily and seasonal variations of outside temperature normal to its location. |
| 6. It is convenient to adopt a list of specific requirements | e. to provide shelter from our environment |
| | g. Resistance to weather and ground moisture, resistance to airborne and impact sound. |

Задание 4. Замените данные в скобках слова и словосочетания на русском языке их английскими эквивалентами и переведите предложения на русский язык.

1. The terms (несущие) and (ненесущие) are used to differentiate the structural requirements of walls.
2. The main function of an external wall (состоит в том, чтобы обеспечить) shelter against wind, rain and the daily and seasonal variations of outside temperature normal to its location, for reasonable indoor comfort.
3. A wall is a (непрерывная), usually (вертикальная) structure, which is thin relative to its length and height.
4. To provide adequate shelter a wall should have (достаточную прочность и устойчивость).
5. (Внешние стены) help to provide shelter from our environment.
6. (Внутренние стены) divide buildings into rooms or compartments.
7. (Удобно) to adopt a list of specific requirements to provide a check.
8. A wall should be (самонесущей) and also support roofs and upper floors.
9. (Используемый тип стены) will generally depend on the availability of materials and labour, economic factors and the design approach

Задание 5. Переведите текст на русский язык письменно со словарем.

Walls Strength

The strength of the materials used in wall construction is determined by the strength of a material in resisting compressive and tensile stress and the way in which the materials are put together. The usual method of determining the compressive and tensile strengths of a material is to subject samples of the material to tests to assess the ultimate compressive and tensile stresses at which the material fails in compression and in tension. From these tests the safe working strengths of materials in compression and in tension are set. The safe working strength of a material is considerably less than the ultimate strength, to provide a safety factor against variations in the strength of materials and their behaviour under stress. The characteristic working strengths of materials, to an extent, determine their use in the construction of buildings. The moderate compressive and tensile strength of timber members has long been used to construct a frame of walls, floors and roofs for houses. The compressive strength of well burned brick combined with the durability, fire resistance and appearance of the material commends it as a walling material. The sense of solidity and permanence and the compressive strength of stone made it the traditional walling material for many larger buildings. Steel and concrete are used principally for their considerable strength as the structural frame members of large buildings. In the majority of small buildings, such as houses, the compressive strength of brick and stone is rarely fully utilized because the functional requirements of stability and exclusion of weather dictate a thickness of wall in excess of that required for strength alone.

Практическое занятие №7.

Тема 7. Architecture./ Архитектура

Цель: Формирование коммуникативных компетенций, овладение лексикой и грамматикой

Знать:

- основные способы работы над языковым и речевым материалом;
- лексику профессиональной деятельности;
- нормы употребления лексики английского языка в профессиональной сфере

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- осуществлять профессиональную коммуникацию в устной и письменной формах на английском языке;
- читать и переводить специальную литературу для пополнения профессиональных знаний;
- изъясняться на бытовые и профессиональные темы; выступать публично (с предварительной подготовкой) с сообщениями и докладами;
- аннотировать, реферировать, переводить литературу по специальности на иностранном языке

Актуальность темы: обусловлена необходимостью овладением УК-4

Теоретическая часть:

Vocabulary:

church	[tʃə:tʃ]	церковь
sidewalk	['saɪdwɔ:k]	тротуар
architect	['ɑ:kitekt]	архитектор
lime	[laɪm]	известь
mansion	['mænfən]	особняк
marble	['mɑ:bl]	мрамор
facade	[fə'sɑ:d]	фасад
designer	[di'zainə]	дизайнер
tower	['tauə]	башня
castle	[kɑ:sl]	замок
architecture	['ɑ:kitektʃə]	архитектура
fortress	['fɔ:tris]	крепость
embellishment	[im'belɪʃmənt]	украшение
dome	[dɒm]	купол
expansion	[ɪks'pænfən]	расширение
to erect	[tu: i'rekt]	возводить
superintendent	[,sju:pərin'tendənt]	прораб
cathedral	[kə'θi:drəl]	собор
pinnacle	['pinəkl]	башенка
exterior	[eks'tiəriə]	внешняя часть
forge	[fɔ:dʒ]	кузница
architectural	[,ɑ:ki'tektʃərəl]	архитектурный
adobe	[ə'dəubi]	самана
buttress	['bʌtris]	подпорка
citadel	['sɪtəd(ə)l]	цитадель
compositional	[,kɒmpə'zɪʃ(ə)nəl]	композиционный
eclecticism	[ɪ'klektɪ'sɪz(ə)m]	эklektизм
mannerism	['mænərɪzm]	особенность
pediment	['pedɪmənt]	фронтон
portico	['pɔ:tɪkəu]	портик, галерея
postmodernism	[,pəʊst'mɒdə(r), nɪz(ə)m]	постмодернизм
woodcut	['wʊd, kʌt]	гравюра на дереве, ксилография
veranda	[və'rændə]	веранда
apse	[æps]	апсида
pointed arch	['pɔɪntɪd ɑ:tʃ]	стрельчатая арка
sacristy	['sækrɪstɪ]	ризница
gabled	['geɪblɪd]	остроконечный
baptistry	[baptɪstrɪ]	баптистерий
neoclassical	[neəklasɪkəl]	неоклассический
remodeling	['ri:'mɒdlɪŋ]	перепланировка
arched colonnade	['ɑ:tʃtəd kələ'neɪd]	арочная колоннада
Renaissance architect	['renəɪsəns ɑ:kitekt]	архитектор эпохи Возрождения
architectural patronage	[ɑ:kitektʃərəl 'pætrənɪdʒ]	архитектурный патронаж
asymmetric plan	[,æsi'metrik plæn]	ассиметричный план

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Architecture is the art or science of planning, building and structures. Without consideration of structural principles, materials, social and economic requirements a building cannot take form.

But without aesthetical quality inherent in its form a building cannot be considered as a work of architecture¹ as well. From the very beginning of construction in human history lots of architectural skills, systems and theories have been evolved for the construction of the buildings, which have housed nations and generations of people in any kind of their activity. Writings on architecture are almost as old as writing itself. Books on the theory of architecture, on the art of buildings, and on the aesthetical view of buildings exist in great number. The oldest book, which sets forth the principles, upon which buildings should be designed and which aim is to guide the architect, is the work of Markus Vitruvius Pollio written in the first century B. C.

Architecture is an art. Its nowadays expression should be creative and consequently new. The heritage of the past cannot be ignored, but it must be expressed in modern terms. There exists an evident paradox in the coexistence of change and survival in every period of human civilization. This paradox of change and repetition is clearly illustrated in any architectural style.

Architecture is also the style or manner of building in a particular country or period of history. There are widely known examples of Gothic architecture all-round the globe. During many centuries mankind admires the architecture of ancient Greece or Roman Empire as well.

Вопросы и задания:

Exercise 1 Answer the following questions:

- 1 What is architecture?
- 2 What is the oldest book to set forth the principles of construction?
- 3 How should mankind deal with the heritage of the past?
- 4 What architecture are widely known all round the globe?
5. What architecture does mankind admire during many centuries?

Exercise 2. Give English equivalents to the Russian words and word combinations:

Архитектура - это искусство или наука о планировании, социальные и экономические требования, архитектурные навыки, строительство, системы и теории для строительства зданий, наследие прошлого нельзя игнорировать, выражено в современных терминах, человечество восхищается архитектурой.

Exercise 3. Match the words (A) with the appropriate definition (B)

- 1) Science a) the work of building or making something, especially buildings, bridges, etc.
- 2) Construction b) a person whose job is building things, esp. houses
- 3) Architecture c) the careful study of the structure and behaviour of the physical
- 4) Building d) the art and practice of designing and making buildings
- 5) Skill e) a person who plans new buildings and is responsible for making sure that they are built properly
- 6) Architect f) a structure with walls and a roof, such as a house or factory
- 7) Builder g) an ability to do an activity or job well, especially because you have practiced it

Практическое занятие №8.

Тема 8. Architectural Planning / Архитектурное планирование.

Цель: Формирование коммуникативных компетенций, овладение лексикой и грамматикой

Знать:

- основные способы работы над языковым и речевым материалом;
- лексико-грамматический минимум в объеме, необходимом для работы с иноязычными текстами в процессе профессиональной деятельности;
- лексику профессиональной направленности;

- навыки использования лексики английского языка в профессиональной сфере

Уметь:

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Владелец: Шебзухова Татьяна Александровна

языке;

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осуществлять профессиональную коммуникацию в устной и письменной формах на английском языке;

читать и переводить специальную литературу для пополнения профессиональных знаний;

- изъясняться на бытовые и профессиональные темы; выступать публично (с предварительной подготовкой) с сообщениями и докладами;

- аннотировать, реферировать, переводить литературу по специальности на иностранном языке

Актуальность темы: обусловлена необходимостью овладением УК-4

Теоретическая часть:

Vocabulary:

1. **hindrance**, **n** –помеха, препятствие;
2. **to repel**, **v** –отражать;
3. **moisture**, **n** –влажность;
4. **to foresee**, **v** – предвидеть;
5. **earthquake**, **n** – землетрясение;
6. **flood**, **n** –наводнение;
7. **arrangement**, **n** –распределение;
8. **axis**, **n** –ось;
9. **device**, **n** – средство;
10. **disadvantage**, **n** –недостаток;
11. **to influence**, **v** – влиять;
12. **to modify**, **v** –видоизменять;
13. **to withstand**, **v** – противостоять;
14. **mold**, **n** – (зд.).плесень;
15. **resistance**, **n** – сопротивление;
16. **extreme**, **n** – крайняя степень;
17. **to penetrate**, **v** – проникать;
18. **patron**, **n** – клиент, заказчик;
19. **sacristy**, **n** – ризница;
20. **ambulatory**, **n** – крытая внутренняя галерея;
21. **commodity**, **n** – предметы потребления;

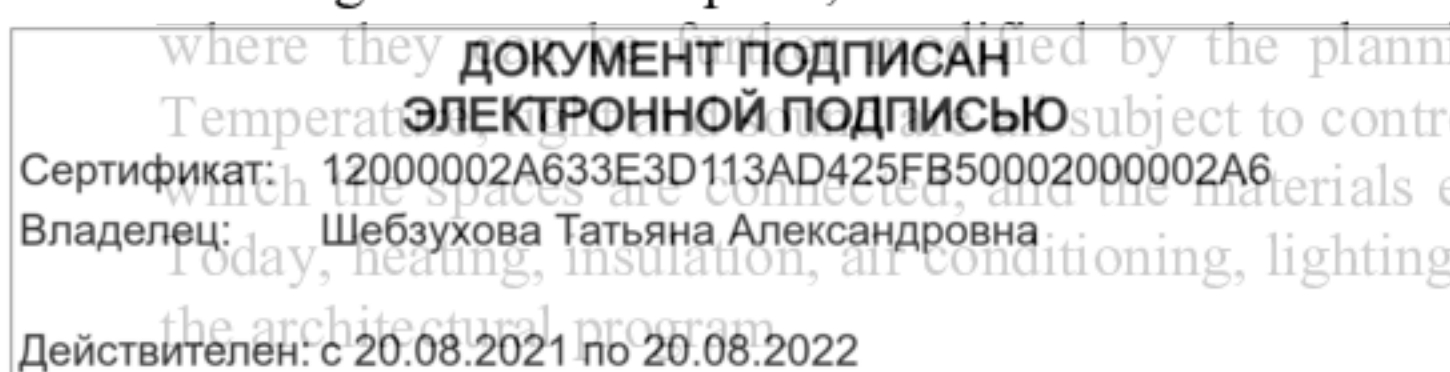
Text: “Architectural Planning”. The architect usually begins to work when the site type and cost of a building have been determined. **Planning the environment.** The natural environment is at once a hindrance and a help, and the architect seeks both to invite its aid and to repel its attack. To make buildings habitable and comfortable, he must control the effects of heat, cold, light, air, moisture, and dryness and foresee destructive potentialities such as fire, earthquake, flood. The placement and form of buildings in relation to their sites, the distribution of spaces within buildings, and other planning devices discussed below are fundamental elements in the aesthetics of architecture. **Orientation.** The arrangement of the axes of buildings and their parts is a device for controlling the effects of sun, wind, and rainfall. Within buildings, the axis and placement of each space determine the amount of sun it receives. Orientation may control air for circulation and reduce the disadvantages of wind, rain, and snow. The characteristics of the immediate environment also influence orientation: trees, land formation, and other buildings create shade and reduce or intensify wind, while bodies of water produce moisture and reflect the sun. **Architectural forms.** Planning may control the environment by the design of architectural forms that may modify the effects of natural forces.

Color. Color has a practical planning function as well as an expressive quality because of the range of its reflection and its absorption of solar rays. Since light colors reflect heat and dark colors absorb it, the choice of materials and pigments is an effective tool of environmental control.

Materials and techniques. The choice of materials is conditioned by their own ability to withstand the environment as well as by properties that make them useful to human beings. One of the architect’s jobs is to find a successful solution to both conditions; to balance the physical and economic advantages of wood against the possibility of fire, termites, and mold, the weather resistance of glass and light metals against their high thermal conductivity, and many similar conflicts.

Interior control. The control of the environment through the design of the plan and the outer shell of a building can’t be complete, since extremes of heat and cold, light, and sounds penetrate into the interior,

where they are further modified by the planning of spaces and by special conditioning devices. Temperature, humidity, and air quality are subject to control by the size and shape of interior spaces, the way in which the spaces are connected, and the materials employed for floors, walls, ceilings, and furnishings. Today, heating, insulation, air conditioning, lighting, and acoustical methods have become basic parts of the architectural program.



Differentiation. The number of functions requiring distinct kinds of space within a building depends not only upon the type of building but also upon the requirements of the culture and the habits and activities of the individual patrons. A primitive house has a single room with a hearth area, and modern one has a separate areas for cooking, eating, sleeping, washing, storage, recreation.

Economic planning. Major expenses in building are land, materials, and labor. In each case they are high when the commodity is scarce and low when it is abundant, and they influence planning more directly when they become restrictive. When land coverage is limited, it is usually necessary to design in height the space that otherwise would be planned in breadth and depth, as in the ancient Roman insula (apartment houses) or the modern skyscraper. When the choice of materials is influenced by cost, all phases of architectural design are affected, since the planning procedure, the technique, and the form of buildings are dependent on materials. High labor cost influence the choice of techniques and, consequently, of materials.

Вопросы и задания.

Exercise 1. Choose the right word.

- The placement and form of buildings in relation to their ... is one of the fundamental elements in the aesthetics of architecture.
a) square b) comfort c) sites
- The arrangement of the ... of buildings and their parts controls the effects of sun wind, and rainfall.
a) rooms b) axes c) spaces
- The characteristics of the immediate ... also influence orientation.
a) environment b) territory c) building
- Color has practical planning ... and expressive quality.
a) choice b) feature c) function
- Planning for use is concerned with convenience of ... and rest.
a) movement b) parts c) requirements
- Major expenses in building are for ... , materials, and labor.
a) habits b) land c) phase

Exercise 2. Match the words from two columns.

- | | |
|-----------------|------------------|
| 1. hindrance | a. ВИДОИЗМЕНЯТЬ |
| 2. to withstand | b. ось |
| 3. patron | c. ПРОТИВОСТОЯТЬ |
| 4. disadvantage | d. ВЛИЯТЬ |
| 5. modify | e. ПОМЕХА |
| 6. to influence | f. ЗАКАЗЧИК |
| 7. axis | g. НЕДОСТАТОК |

Exercise 3. Put the verbs in brackets in the correct tense.

- The architect usually ... (begin) to work when the site type and cost of a building have been determined.
- The natural environment is at once a hindrance and a help, and the architect ... (seek) both to invite its aid and to repel its attack.
- Orientation may ... (control) air for circulation and reduce the disadvantages of wind, rain, and snow.
- The choice of materials ... (be) conditioned by their own ability to withstand the environment as well as by properties that make them useful to human beings.
- Temperature, light and sound ... (be) all subject to control by the size and shape of interior spaces, the way in which the spaces are connected, and the materials employed for floors, walls, ceilings, and furnishings.
- Major expenses in building ... (be) land, materials, and labor.

Exercise 4. Give the English equivalents.

Отразить атаку; пригодный для жилья; расположение; положение; результаты воздействия солнца, ветра и дождя; создавать влажность и отражать солнце; важное (эффективное) средство контроля; выбор материалов для строительства; способность противостоять воздействиям окружающей среды; отопление, изоляция, кондиционирование воздуха, освещение, акустические методы; функциональное планирование; расходы; влиять на выбор материалов; зависеть от требований заказчика.

Exercise 5. Answer the questions.

- When does the architect begin to work on the project?
- What are the main factors in architectural planning?
- What are the fundamental elements in the aesthetics of architecture?
- What must the architect control to make buildings habitable and comfortable?
- What is the planning for use concerned with?

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6. What are the major expenses in building?

Практическое занятие №9.

Тема 9. Architecture of Ancient Times / Архитектура древнейших времён.

Цель: Формирование коммуникативных компетенций, овладение лексикой и грамматикой

Знать:

- основные способы работы над языковым и речевым материалом;
- лексико-грамматический минимум в объеме, необходимом для работы с иноязычными текстами в процессе профессиональной деятельности;
- лексику профессиональной направленности;
- нормы употребления лексики английского языка в профессиональной сфере

Уметь:

- осуществлять профессиональную коммуникацию в устной и письменной формах на английском языке;
- читать и переводить специальную литературу для пополнения профессиональных знаний;
- изъясняться на бытовые и профессиональные темы; выступать публично (с предварительной подготовкой) с сообщениями и докладами;
- аннотировать, реферировать, переводить литературу по специальности на иностранном языке

Актуальность темы: обусловлена необходимостью овладением УК-4

Теоретическая часть:

Vocabulary:

Craftsman

Funerary

post-and-lintel

corbel vault

vaulting

capital

steeply battered pylon

incised relief

feature

outstanding

spectacular

large-scale

divinity

prosperous

excellence

durable

blossoming

encouragement

mortuary

pillar

ramp

successor

refinement

ремесленник

погребальный, траурный

стоечно-балочная

ложный свод

свод; возведение свода

капитель

сильно суженный кверху пилон

резной рельефный орнамент

черта, свойство; отличаться

выдающийся

эффектный, захватывающий

крупномасштабный

божество

процветающий

высокое качество, мастерство

усовершенствование

прочный, долговечный

расцвет

поощрение

погребальный

столб, колонна, пилон

скат, уклон, наклонная плоскость

последователь, наследник

The architecture of Egypt developed from the 3rd millennium B.C. to the Roman period. During this period artist and craftsmen were drawn to the court to work under the patronage of the King and his great nobles. Techniques of the working in stone, wood and metal made tremendous progress. The most outstanding achievement of this period was the massive funerary monuments and temples built of stone for permanence, featuring corbel vaults without arches or vaulting, and pyramids. This architecture gave the world the earliest building in dressed stone, invented the column, capital and cornice. Features characteristic of the ancient Egyptian architecture also include the obelisk, the steeply battered pylon, the symbolic lotus column, and incised relief decoration without any structural relevance. The

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ЭЛЕКТРОННОЙ ПОДПИСЬЮ
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Владелец: Шебзухова Татьяна Александровна
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pyramids of the Old Kingdom, majestically planted on the desert edge, are the most spectacular of all funerary works and the only remained wonder of the world. The world's first large-scale monument in stone is Zoser's necropolis at Sahara, built it 2766B.C. by the Imhotep, the earliest named architect. These monuments celebrated the divinity of the kings of Egypt, linking the people with the great gods of earth and sky. During the prosperous period, know as the Middle Kingdom fortresses were built to defend the southern and eastern borders. Craftsmen achieved new levels of excellence. Very little architecture remains, but what has survived shows great simplicity and refinement, less durable materials were used. The example is the pyramid of Sesostri I at Lisht. Great buildings began to be erected once again in the New Kingdom(1570-1085B.C.), marking new blossoming of the arts and crafts of ancient Egypt. The kings gave encouragement to artists and craftsmen by ordering great temples and palaces to be built throughout Egypt. The temple walls were covered with reliefs celebrating the achievements of the Icings and the power of the gods. The most notable monuments are the Mortuary Temple of Queen Hatshe put (the only woman - pharaoh) at Deir el Bahari, with its pillared halls, colonnades, and gigantic ramps connecting the different levels; the magnificent Great Temple at Karnak devoted to Amon as the universal god of Egypt. The final revival took place under the rule of the Ptolemies, the successors of Alexander the great, who built numerous temples of traditional style but slightly more elegant and less crushingly inhuman. The finest examples that survive are the Temple of Horus at Eftu and the temples on the islands of Philae.

Вопросы и задания.

Exercise 1. Find proper Russian words with the same roots as the following English words:

Egypt, period, patronage, technique, metal, progress, massive, monument, construction, arch, pyramids, column, cornice, characteristic, obelisk, symbolical, material, relief, colonnade, universal, traditional, style, elegant, gigantic

Exercise 2. Find the English equivalents for the following Russian words:

А стоечно-балочная конструкция; поощрение; колонна; высокое мастерство; скат; сильно суженный кверху пилон; траурный; ложный свод; резной рельефный орнамент; воздвигать; божество; выдающийся; последователь; уцелеть; возрождать

В divinity; pillar; to revive; post-and-lintel construction; to survive; corbel vault; excellence; outstanding; ramp; encouragement; to erect; successor; incised relief; funerary; steeply; buttered pylon

Exercise 3. Find the false sentences using the information from the text. Correct the false sentences:

- 1) Techniques of working in reinforced concrete made tremendous progress.
- 2) The architecture of Egypt gave the world the column, capital and cornice.
- 3) The world's first large-scale monument in stone is the pyramid of Sesostri I at Lisht.
- 4) Many architectural monuments of the Middle Kingdom can be seen nowadays.
- 5) New blossoming of the arts and crafts of ancient Egypt began in the New Kingdom.

Exercise 4. Answer the following questions:

- 1) When did the old ancient Egyptian architecture develop?
- 2) Into what period could it be classified?
- 3) What typical structures did the architecture of Egypt produce?
- 4) What system of construction was used in Ancient Egypt?
- 5) What elements did this architecture invert?
- 6) What is the only remained wonder of the world?
- 7) Who was the earliest named architect?
- 8) How do the structures of the Old, Middle and New Kingdoms differ?
- 9) When did the final revival of ancient Egyptian architecture take place?

Практическое занятие №10.

Тема 10. Orders of Architecture/Современная архитектура.

Цель: Формирование коммуникативных компетенций, овладение лексикой и грамматикой

Знать:

- основные языковым и речевым материалом;
 - лексикой в объеме, необходимом для работы с иноязычными текстами в процессе профессиональной деятельности;
 - лексику профессиональной направленности;
 - нормы употребления лексики английского языка в профессиональной сфере

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 Действителен: с 20.08.2021 по 20.08.2022

Уметь:

- осуществлять профессиональную коммуникацию в устной и письменной формах на английском языке;
- читать и переводить специальную литературу для пополнения профессиональных знаний;
- изъясняться на бытовые и профессиональные темы; выступать публично (с предварительной подготовкой) с сообщениями и докладами;
- аннотировать, реферировать, переводить литературу по специальности на иностранном языке

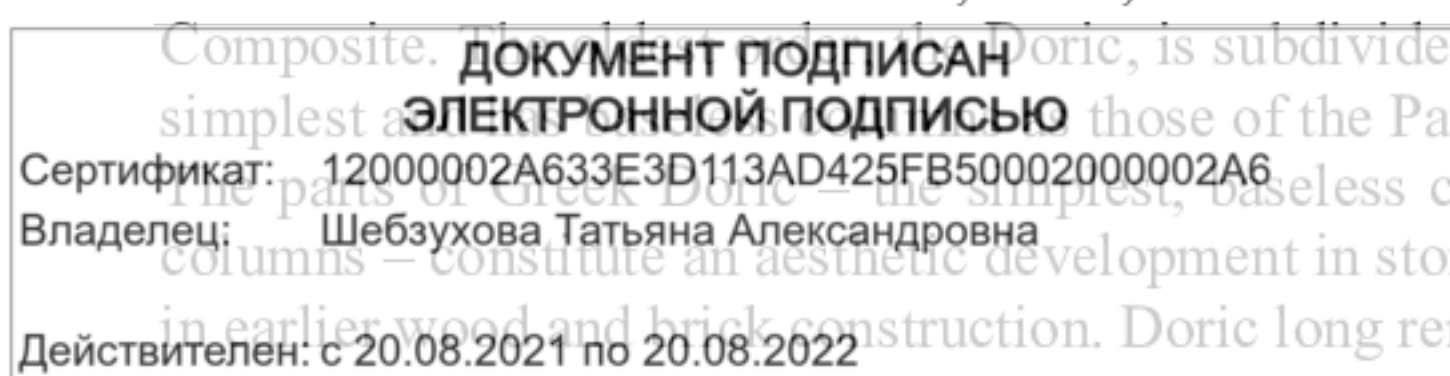
Актуальность темы: обусловлена необходимостью овладением УК-4

Теоретическая часть:**Vocabulary:**

1. **replacement, n** – [rɪˈpleɪsmənt] замена
2. **pillar, n** – [ˈpɪlɹ] столб, колонна, опора
3. **carpentry** плотничное дело
4. **order** ордер
5. **entablature** антаблемент
6. **Doric order** дорический ордер
7. **Ionic order** ионический ордер
8. **Corinthian order** коринфский ордер
9. **Tuscan order** тосканский ордер
10. **Composite order** композитный, сложный ордер
11. **eventually, adv** – [ɪˈventʃuəlɪ] в конце концов
12. **arrangement, n** – [əˈreɪnmənt] расположение
13. **to define, v** – [dɪˈfaɪn] определять
14. **pattern, n** – [ˈpætɹn] модель, образец
15. **capital** капитель
16. **frieze** фриз
17. **shell, n** – [ʃel] оболочка, каркас
18. **spreading** – [ˈspredɪŋ] распространяющийся
19. **to evolve, v** – [ɪˈvɒlv] развиваться
20. **intimation, n** – [ɪnˈtɪmeɪʃ(ə)n] указание, сообщение, намек
21. **elaborately** – [ɪˈlæb(ə)rətɪ] тщательно (разрабатывать)
22. **to carve, v** – [ˈkɑːv] резать, вырезать
23. **hoop, n** – [huːp] обруч
24. **volute** волюта; завиток (архитектурная особенность ионического стиля)
25. **fussy, a** – [ˈfʌsɪ] вычурный
26. **to exceed, v** – [ɪkˈsiːd] превышать, превосходить
27. **successive** последующий, следующий
28. **acanthus** акант (орнамент)
29. **corner, n** – [ˈkɔːnɹ] угол
30. **cornice** карниз; свес
31. **mutules** мутулы, модильоны дорического ордена

The first step in architecture was simply the replacement of wooden pillars with stone ones, and the translation of the carpentry and brick structural forms into stone equivalents. This provided an opportunity for the expression of proportion and pattern. This expression eventually took the form of the invention or evolution of the stone “orders” of architecture. These orders, or arrangements of specific types of columns supporting an upper section called an entablature, defined the pattern of the columnar facades and upper works that formed the basic decorative shell of building.

The Greeks invented the Doric, Ionic, and Corinthian orders. The Romans added the Tuscan and the Composite. The Doric order, is subdivided into Greek Doric and Roman Doric. The first is the simplest and those of the Parthenon. Roman Doric has a base and is less massive. The parts of Greek Doric – the simplest, baseless columns, the spreading capitals, and frieze above the columns – constitute an aesthetic development in stone incorporating variants on themes used functionally in earlier wood and brick construction. Doric long remained the favourite order of the Greek mainland and



western colonies, and it changed little throughout its history. The Ionic order evolved later, in eastern Greece. About 600 BC, in Asia Minor, the first intimation of the style appeared in stone columns with capitals elaborately carved in floral hoops – an Orientalizing pattern familiar mainly on smaller objects and furniture and enlarged for architecture. It developed throughout so called Aeolic capital with vertically springing volutes or spiral ornaments to the familiar ionic capital, the volutes of which spread horizontally from the centre and curl downward. The order was always fussier and more ornate, less stereotyped than Doric. The Ionic temples of the 6th century exceed in size and decoration even the most ambitious of their Classical successors. Such were the temples of Artemis at Ephesus in Asia Minor and the successive temples of Hera on the island of Samos. The Corinthian order originated in the 5th century BC in Athens. It had Ionic capital elaborated with acanthus leaves. In its general proportions it is very like the Ionic. For the first time the Corinthian order was used for temple exteriors. Because of its advantage of facing equally in four directions it was more adaptable than Ionic for corners. There are not many Greek examples of the Corinthian order. The Romans widely used it for its showiness. The earliest known instance of the Corinthian order used on the exterior is the choragic monument of Lysicrates in Athens, 335/334 BC. A simplified version of the Roman Doric is the Tuscan order. It has a less decorated frieze and no mutules in the cornice. The Composite order is also a late Roman invention. It combines the elements from all the Greek orders.

Вопросы и задания:

Exercise 1. Form the comparative and superlative degrees from the following adjectives and adverbs:

Large, big, far, early, new, much, simple, good, small, little, easy, high, many, low, well, wide, badly, durable, massive, old, elegant, notable, outstanding.

Exercise 2. Choose the correct word from the two words given in brackets. 1. The Greeks ... (invented; placed) the Doric, Ionic, and Corinthian orders. 2. The... (oldest; youngest) order, the Doric, is subdivided into Greek Doric and Roman Doric. 3. Roman Doric ... (have; has) a base and is less massive. 4. For the first time the Corinthian order was used for ... (theatres; temples). 5. The Ionic was always fussier than ... (the Doric; the Tuscan).

Exercise 3. Choose the right term.

- The upper section of a classical order is a/an
a) volute b) entablature c) base
- Spiral ornaments are called ...
a) capitals b) mutules c) volutes
- The part of the column is
a) frieze b) capital c) cornice
- A particular style of column with its entablature having standardized details is
a) façade b) colonnade c) order

Exercise 4. Match the words and their definitions.

- Step ~ a model for use in making things
- Pattern ~ a stage in a process
- Arrangement ~ to develop gradually
- Subdivide ~ putting in a specific order
- Invention ~ to divide into smaller parts
- Evolve ~ a new method, process, or device

Exercise 5. Find the sentences in the Present Simple and Past Simple Tenses in the text.

Exercise 6. Fill in the gaps.

The Greeks ... (invent) the Doric, Ionic, and Corinthian orders. 2. The Romans ... (add) the Tuscan and the Composite. 3. The oldest order, the Doric, ... (be) subdivided into Greek Doric and Roman Doric. 4. Roman Doric has a base and ... (be) less massive. 5. The Ionic order ... (evolve) later, in eastern Greece. 6. There ... (be) not many Greek examples of the Corinthian order. 7. A simplified version of the Roman Doric ... (be) the Tuscan order.

Exercise 7. True or false.

**ДОКУМЕНТ ПОДПИСАН
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Владелец: Шебзухова Татьяна Александровна

Действителен: с 20.08.2021 по 20.08.2022

... architecture was simply the replacement of wooden pillars with
... the Greeks invented Tuscan and Composite orders.
... the oldest order, the Doric, is subdivided into Greek Doric and Roman Doric.
... Roman Doric has no base.

f) the Ionic order was evolved later, in eastern Greece.

Практическое занятие №11.

Тема 11. British Architecture / Британская архитектура

Цель: Формирование коммуникативных компетенций, овладение лексикой и грамматикой

Знать:

- основные способы работы над языковым и речевым материалом;
- лексико-грамматический минимум в объеме, необходимом для работы с иноязычными текстами в процессе профессиональной деятельности;
- лексику профессиональной направленности;
- нормы употребления лексики английского языка в профессиональной сфере

Уметь:

- осуществлять профессиональную коммуникацию в устной и письменной формах на английском языке;
- читать и переводить специальную литературу для пополнения профессиональных знаний;
- изъясняться на бытовые и профессиональные темы; выступать публично (с предварительной подготовкой) с сообщениями и докладами;
- аннотировать, реферировать, переводить литературу по специальности на иностранном языке

Актуальность темы: обусловлена необходимостью овладением УК-4

Теоретическая часть:

Vocabulary:

limestone	известняк		
rude	примитивный,		грубый
primordial	исконный,		первобытный
sanctuary	святилище		
juxtaposition	наложение,		сопоставление
slab	плита		
prop	подпорка,	опора,	стойка
precarious	непрочный,		ненадёжный
invasion	вторжение,		нашествие
clay	глина		
hut	хижина		
timber	лесоматериалы		
hearth	домашний		очаг
beam	балка		
auxiliary	вспомогательный		
shed	сарай		
barn	амбар		

Text

British Architecture in the Period of Ancient History

British architecture passed several main stages in its development. It is closely connected with the history of the country. As far as historical research could establish, the first inhabitants of the British Isles were nomadic Stone Age hunters. They lived probably in the dry caves of limestone and chalk hills. An Alpine race came to the British Isles about 1700 B.C. A characteristic monument of this civilization, primordially rude and primordially majestic, is the so-called Stonehenge, a sort sanctuary erected on Salisbury Plain about 1100 B.C. or some-what earlier. This circular structure was formed by a mere juxtaposition of tall horizontal slabs, capping those perpendicular props for all the world like houses built by infant architects reckless enough to find a seemingly precarious balance of the hanging stones-whence the name of the structure. During the invasion of Celts tribes (8-th-Is' cc B.C.) the more wealthy south-east, true they were at first no more than large groups of wattle-and-clay houses enriched by a sort of fortified fence. The invasion by the Romans (1st B.C.-5c. A.D.) brought the country into contact with the Roman civilization.

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Major systems of fortifications were constructed as a defense. Then came the occupation of the country by Anglo-Saxon tribes. The Anglo-Saxon had no big cities, only scattered villages and townships, that is, arrangements of the lord's

house with the wattle-and-mud huts of the villagers grouped round it. The huts were primitive affairs, of wood and clay while timber was abundant with no chimney over the open hearth but a hole in the roof to let the smoke out and to let the light in. The hearth was usually nothing more complicated than just a large flat stone in the middle of the earthen floor. Much of the smoke supposed to escape through the hole in the roof remained in the low-roofed hut and blackened the beams of the roof with soot. The walls were bare; the narrow holes cut them to admit light, admitted much of the wind and the cold as well. The lord's house had a large yard where much of the housekeeping work was done with lots of auxiliary buildings like sheds and barns and the like inside it. It was protected by a stout fence supplemented by a sort of circular fortification, or mound. The interior arrangements were characteristic: there was always a spacious hall where most of the family's social life was spent, where the lord had his meals with his family and his guests. The light came through narrow holes in the walls covered with oiled linen. The walls were hung with coarse but bright-patterned curtains, though quite often it was only the part of the hall allotted for the master of house and his most honoured guests that was thus decorated, the rest of the walls being bare. The hearth was nothing much more elaborate than a flat broad stone and the blackened roof beams were just as much the feature of the lord's hall as they were of the humble dwelling.

Вопросы и задания.

1. Read the following word combinations and translate them into Russian:

To pass several stages; to be closely connected with the history; the first inhabitant caves of limestone; to form by a mere juxtaposition of slabs; perpendicular props; architects; precarious balance of the hanging stones; wattle-and-clay houses; fence; to bring into contact; major systems of fortification; scattered villages and townships; open hearth; in the middle of the earthen floor; low-roofed huts; to be protected by a stout fence; to cover with oiled linen; bright-patterned curtains; hall allotted for the master of house; flat broad stone; humble dwelling;

2. Find the false sentences using the information from the text.

«Correct the false sentences:

- 1) The first inhabitants of the British Isles lived in the dry caves.
- 2) Towns appeared first in the wealthier north-east.
- 3) During the Roman invasion no fortifications were constructed.
- 4) There were no big cities during the Anglo-Saxon period.
- 5) The huts of the villagers were made of wattle and clay.
- 6) The light came through wide windows.
- 7) The walls of the lord's house were painted.

3. Answer the following questions:

- 1) Where did the first inhabitants of the British Isles live?
- 2) What sort of monument is the so-called Stonehenge?
- 3) When did the first towns begin to appear?
- 4) How did the dwellings of the villagers look like?
- 5) What were the interior arrangements of the lord's house?

Практическое занятие №12.

Тема 12. Russian Architecture / Русская архитектура.

Цель: Формирование коммуникативных компетенций, овладение лексикой и грамматикой

Знать:

- основные способы работы над языковым и речевым материалом;
- лексико-грамматический минимум в объеме, необходимом для работы с иноязычными текстами в

ДОКУМЕНТ ПОДПИСАН ЭЛЕКТРОННОЙ ПОДПИСЬЮ

Сертификат: 12000002A633E3D113AD425FB50002000002A6

Владелец: Шебзухова Татьяна Александровна

Действителен: с 20.08.2021 по 20.08.2022

в профессиональной сфере

- осуществлять профессиональную коммуникацию в устной и письменной формах на английском языке;
 - читать и переводить специальную литературу для пополнения профессиональных знаний;
 - изъясняться на бытовые и профессиональные темы; выступать публично (с предварительной подготовкой) с сообщениями и докладами;
 - аннотировать, реферировать, переводить литературу по специальности на иностранном языке
- Актуальность темы:** обусловлена необходимостью овладением УК-4

Теоретическая часть:

belltower	<input type="text"/>	колокольня
carpenter	<input type="text"/>	плотник
porch	<input type="text"/>	крыльцо
log-cabin	<input type="text"/>	изба
slender	<input type="text"/>	тонкий, стройный
lavish	<input type="text"/>	splendour
щедрый	<input type="text"/>	
блеск, великолепие	<input type="text"/>	
graceful	<input type="text"/>	изящный
majestic	<input type="text"/>	величественный
visible	<input type="text"/>	видимый
skill	<input type="text"/>	искусство, мастерство
gift	<input type="text"/>	дарование, талант
embroideries	<input type="text"/>	украшение
band	<input type="text"/>	зд. пояс, полоса

Russian borrowed its early architecture, like its icon painting, from Byzantium.

From the eleventh to the thirteenth centuries early towns were built on defensive sites on high river banks. From afar were visible low white walls with towers, churches with brilliant domes and bell towers. The finest examples of traditional architecture can be seen in the towns of Yaroslavl, Kostroma, Suzdal, Bogolyubovo and Sergiev Posad.

In Russia, timber has always been the most natural building material. Russian carpenters decorate the diverse structures they were building with beautiful carved decorations above windows and porches. One can see such decorations on log-cabins, fortress towers, huge cathedrals, churches and monasteries.

Wooden and masonry architecture developed side by side in medieval Russia, one stimulating and gratifying the love for verticality and slenderness, the other satisfying a yearning for massiveness, monumentality, and lavish decoration in the expression of power and splendour. The few remaining examples of the ancient wooden structures are now in Rostov and also in the museums of wooden buildings in Novgorod, Kostroma and Suzdal. These examples show the skill and gift of their builders to harmonize the building proper with the landscape.

The most majestic and famous examples of wooden church architecture may be found on the island of Kizhi in Lake Onega. Here you will be impressed by the grand and gracefully silhouetted multi-domed Cathedral of the Transfiguration and ten-domed

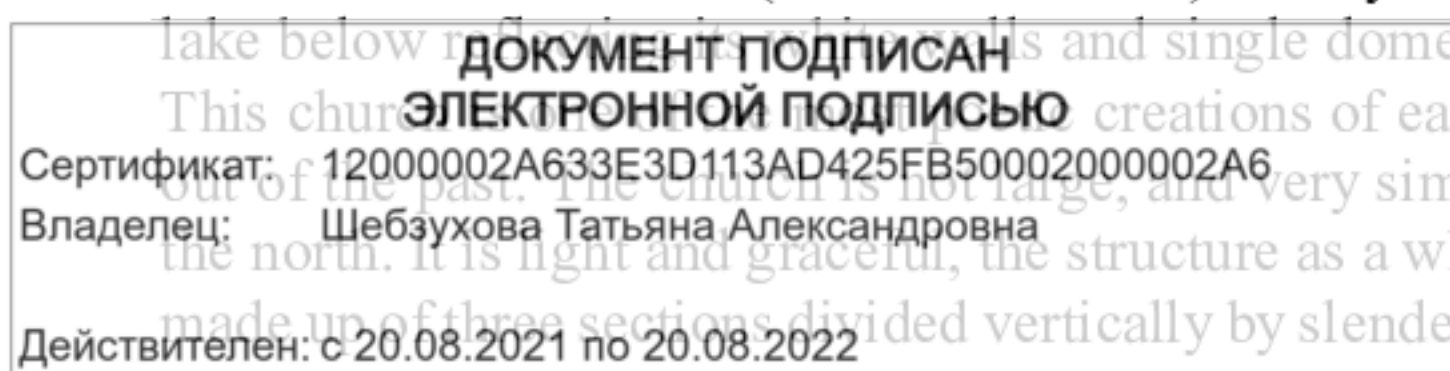
Church of the Intercession with its bell tower.

Wooden architecture predominates in Northern Russia and in some of the older settlements and towns of the Siberia, such as Tyumen.

One of the best-known Russian churches in the northern style is the Church of the

Intercession on the Nerl (Pokrova na Nerli). Today it stands alone in the midst of green meadows, the small lake below reflecting its multiple domes and single dome.

This church is a masterpiece of early Russian architecture which ever come down to us out of the past. The church is not large, and very simple in plan, with the cubical basic structure usual for the north. It is light and graceful, the structure as a whole seems hardly to touch the ground. Each facade is made up of three sections divided vertically by slender columns, and horizontally connected by a decorative



band of blind arcading of the same white stone as the wall itself. As for the roofing, it was vaulted, so that each of the vertical wall sections ends in a blind arch, with long, narrow windows and small sculptured figures high up in the arch.

The builders of the most of Vladimir and Suzdal churches used cut stones instead of brick, typical for Byzantine and Kievan churches. Also they used stone embroideries, uncommon in Byzantium. They adopted the general features of the square plan, with three altar apses and the four columns supporting a flat cupola with its circular drum.

Вопросы и задания:

Exercise 1 Find the false sentences using the information from the text. Correct the false sentences:

- 1) Early Russian architecture was derived from the Byzantine architecture.
- 2) Early Russian towns were built on defensive sites.
- 3) In Russia, stone has always been the most natural building material.
- 4) Russian churches and cathedrals were rich decorated with carved decorations.
- 5) Masonry architecture was not developed in medieval Russia.
- 6) Wooden architecture predominates in Southern Russia.
- 7) The builders of the most Vladimir Churches used cut stones instead of brick.

Exercise 2 Fill in the gaps with the words given below:

- 1) Low white walls with towers, churches with brilliant... and ... were visible... .
- 2) Russian ... were decorated with carved decorations.
- 3) There are some remaining examples of ancient ... architecture in Rostov.
- 4) Vladimir and Suzdal builders widely used stone
- 5) The Church of the Intercession on the Nerl is one of the best-known ... of early Russian architecture.

wooden; bell towers; creation; domes; embroideries; from afar; log-cabins.

Exercise 3 Answer the following questions:

- 1) Where did Russia borrow its early architecture from?
- 2) What has always been the most natural building material in Russia?
- 3) Did wooden and masonry architecture develop side by side in medieval Russia?
- 4) What do the best examples of wooden Russian architecture show?
- 5) How is one of the most famous Russian churches in the northern style called?
- 6) Can you describe the Church of the Intercession on the Nerl?
- 7) What material did builders of Vladimir and Suzdal churches use?

Exercise 4 Find in the text and put down key words that can be used to speak about early Russian architecture

Exercise 5 Summarise your knowledge of the question under consideration.

Discuss it with your partner. Use exercise 5.3.3 as a plan

Практическое занятие №13.

Тема 13. Famous Architects / Знаменитые архитекторы.

Цель: Формирование коммуникативных компетенций, овладение лексикой и грамматикой

Знать:

- основные способы работы над языковым и речевым материалом;
- лексико-грамматический минимум в объеме, необходимом для работы с иноязычными текстами в процессе профессиональной деятельности;
- лексику профессиональной направленности;
- нормы употребления лексики английского языка в профессиональной сфере

Уметь:

- осуществлять профессиональную коммуникацию в устной и письменной формах на английском языке;

- читать и понимать профессиональную литературу для пополнения профессиональных знаний;

- извлекать из профессиональных текстов необходимую информацию; выступать публично (с предварительной подготовкой) с сообщениями и докладами;

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Владелец: Шебзухова Татьяна Александровна

- аннотировать, реферировать, переводить литературу по специальности на иностранном языке

Актуальность темы обусловлена необходимостью овладением УК-4

Действителен: с 20.08.2021 по 20.08.2022

Теоретическая часть:**Vocabulary:**

evidence
exact
authorship

доказательство, подтверждение
точный
авторство

authentic

подлинный, достоверный

spirit

дух

vigour
refined
courage
enormous
scarcity
deviser
obvious
surveyor
decay
scheme
entire
spacious

сила, энергия
утонченный, изысканный
мужество
огромный
недостаток; редкость
изобретатель
очевидный, явный
зд.: руководитель строительных работ
разрушение, распад
план, проект
целый; сплошной; полный
просторный, обширный

equal
quire
molding
discreet

равный
место хора(в соборе)
лепное украшение, карниз

Inigo Jones and Christopher Wren are the greatest English architects to date.

Inigo Jones' (1573 – 1652) early years are traditionally associated with a number of neo-classic buildings, but there is no exact evidence of his authorship.

His first authentic building, and also his finest, was the Banqueting Hall in

Whitehall intended to form part of ambitious royal palace. The design of Inigo Jones for Whitehall Palace (1638) and Queen's Chapel (1623) in London introduced

English patrons to the prevailing architectural ideas of northern Italy in the late 16th- architects such as Palladio, Serlio, and Vincenzo Scamozzi, Jones approached the

Baroque spirit in his works by unifying them with a refined compositional vigour.

Queen's House is an Italian villa sympathetically reinterpreted. The upper floor loggia is very Palladian, as is also the two-armed, curved open staircase to the terrace. The proportions and the general effect are long and low and very un-Italian. It must have required considerable courage on the part of the architect to break with established tradition. It is small wonder that the influence of Inigo Jones was enormous despite the scarcity of his recorded works. It is said that Inigo Jones is to architecture what Shakespeare is to literature.

The chief task of the architect is to create buildings of character; this implies that the architect should be an artist as well as a deviser of construction. The true greatness as an artist and constructor is revealed in the works of another famous

English architect Sir Christopher Wren.

The period of Wren's activity as an architect covers the last forty years of the seventeenth century and extends for twenty years into eighteenth. Wren was born in the quiet Wiltshire village of East Kroyle. He

was the son of a country gentleman who was late to become Dean of Windsor. He was educated at Wensminster

School and then at Christ Church College, Oxford. His genius was obvious even in childhood, though then it was turned more to the problems

of mathematics and astronomy. In 1657, when Wren was 25, he was appointed Professor of Astronomy at

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Владелец: Шебзухова Татьяна Александровна
Действителен: с 20.08.2021 по 20.08.2022

Grasham College in London. His spectacular talents quickly came to notice of Charles II and in 1660 Wren was appointed assistant to the Surveyor General. To tell the truth, Wren never trained as an architect. His architectural career proper began under family patronage. His uncle commissioned him to design a couple of buildings at Cambridge (Pembroke College Chapel) and Oxford (Sheldonian Theatre). They are moderately successful and, at any rate, still stand. Wren's interest in architecture was revealed after his visit to Paris in 1665. On his return to England he was asked by the King to produce plans for the restoration of old St. Paul's which was in a state of decay. But the Great Fire of 1666 put an end to the possibilities of restoring the old cathedral. The Great Fire also gave Wren the opportunity to suggest two grandiose schemes: the rebuilding of the entire commercial heart of London to a spacious master plan with wide street, huge piazzas and long perspectives and the rebuilding of St. Paul's. This first scheme failed because of the powerful influence of speculators and the second scheme was rejected by the church authorities as Wren suggested a Romanesque church dominated by a large rotunda covered by a dome. He wanted to make the cathedral in the shape of the so-called Greek cross with equal arms. This church would be far from the standards of usual Gothic church with quire, nave and aisles in the form of a cross with three short arms and one long arm. Wren was asked to make another plan which would include these traditional elements. This second plan was approved.

By 1666 Christopher Wren was appointed Surveyor General. It took much time of the architect. The colossal task of demolishing the old cathedral continued for 6 years. In November 1675 the rebuilding of St. Paul's began. It was to go on for about 40 years.

Architecture, first and last and all the time, is proportion. Wren's proportions – in his columns, his moldings, his decorations – all have delicacy. They are well-bred, well-mannered and discreet. His dome when he built it, was the third largest in the world. Yet such was Wren's genius that he managed to give it an air of modesty.

Wren's greatest achievement, St. Paul's Cathedral, London (1675 – 1711), owes much to French and Italian examples of the Baroque period; but the plan shows a remarkable adaptation of the traditional English cathedral plan to Baroque spatial uses.

Wren is also notable for his design of about 50 city buildings, marvelous for their beauty; Greenwich Observatory; Hampton Court Palace; Greenwich Hospital; Kensington Palace – the Grangery; Windsor Town Hall and others.

Wren died in 1723. He lies buried in St. Paul's. His tomb is a plain slab of stone on which is written: "If you seek his monument, look around you".

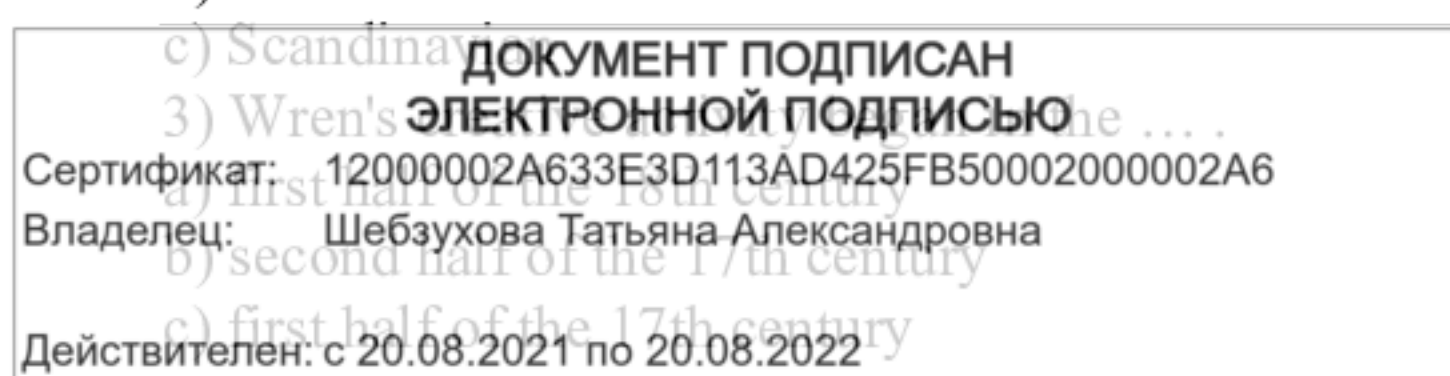
Вопросы и задания:

Exercise 1 Find the false sentences using information from the text. Correct the false sentences:

- 1) Jones' early years are associated with gothic buildings.
- 2) Jones' first authentic building was Queen's Chapel in London.
- 3) Jones greatly influenced the development of the English architecture.
- 4) Christopher Wren lived and worked in the 16th century.
- 5) Wren's genius was obvious even in childhood.
- 6) Wren studied architecture at Grasham College.
- 7) Wren prepared designs for restoring the St. Paul's.
- 8) Wren's first scheme was too advanced to meet with approval.
- 9) Christopher Wren presented English Rococo.

Exercise.2 Complete the following sentences:

- 1) At the early stage of his creative activity Jones worked in ... style.
 - a) gothic
 - b) neo-classic
 - c) rococo
- 2) Inigo Jones was heavily influenced by ... architects.
 - a) Italian
 - b) Greek
 - c) Scandinavian
- 3) Wren's ... the ...
 - a) first half of the 18th century
 - b) second half of the 17th century
 - c) first half of the 17th century



- 4) At the age of 25 Wren was appointed
 - a) assistant to the Surveyor General
 - b) Surveyor General
 - c) Professor of Astronomy
- 5) St.Paul's exhibits a brilliant example of English
 - a) Baroque
 - b) Gothic
 - c) Classicism
- 6) The rebuilding of St.Paul's was to go on for about
 - a) 4 years
 - b) 14 years
 - c) 40 years
- 7) Architecture is first of all
 - a) decoration
 - b) proportion
 - c) perspective

Exercise 3 Answer the following questions:

- 1) What are Jones' early years associated with?
- 2) What is Jones' first authentic and finest building?
- 3) What is the period of Wren's creative activity?
- 4) Why is Wren considered to be a versatile man?
- 5) Why wasn't Wren's first design for rebuilding St.Paul's met with approval?
- 6) How can we appreciate St.Paul's cathedral?
- 7). what buildings were designed by Wren?

Exercise 4. Find English equivalents for the following Russian words:

Аподлинный; огромный; подразумевать; требовать; утонченный; точный;
 Потерпеть неудачу; быть обязанным; просторный; изумительный; обнаруживать;
 сдержанный; выдающийся; устанавливать; равный
 В notable; spacious; to fail; to establish; authentic; to imply; to owe; refined;
 Enormous; to reveal; to require; discreet; exact; marvelous; equal

Практическое занятие №14.

Тема 14. Town Planning / Градостроительство.

Цель: Формирование коммуникативных компетенций, овладение лексикой и грамматикой

Знать:

- основные способы работы над языковым и речевым материалом;
- лексико-грамматический минимум в объеме, необходимом для работы с иноязычными текстами в процессе профессиональной деятельности;
- лексику профессиональной направленности;
- нормы употребления лексики английского языка в профессиональной сфере

Уметь:

- осуществлять профессиональную коммуникацию в устной и письменной формах на английском языке;
- читать и переводить специальную литературу для пополнения профессиональных знаний;
- изъясняться на бытовые и профессиональные темы; выступать публично (с предварительной подготовкой) с сообщениями и докладами;
- аннотировать, реферировать, переводить литературу по специальности на иностранном языке

Актуальность темы: обусловлена необходимостью овладением УК-4.

Теоретический документ

ДОКУМЕНТ ПОДПИСАН
ЭЛЕКТРОННОЙ ПОДПИСЬЮ

Сертификат: 12000002A633E3D113AD425FB50002000002A6

Владелец: Шебзухова Татьяна Александровна

Действителен: с 20.08.2021 по 20.08.2022

ds. Explain them

freedom	3. свобода
development	4. изменять
to exist	5. движение
society	6. развитие; расширение
recent	7. окружать
needs	8. нужды
to accept	9. описание
to define	10. цель
to connect	11. определять
complete	12. создание
movement	13. существовать
to change	14. приспособлять(ся)
main	15. общество
to adapt	16. соединять
creation	17. принимать
to surround	18. недавний

2. Read the text. Mark which sentences give explanation to the term “master plan”

Town Planning

(1) That cities should have a plan is now admitted in our time of large-scale construction and planmaking has become an everyday activity. The purpose of a town plan is to give the greatest possible freedom to the individual. It does this by controlling development in such a way that it will take place in the interests of the whole population.

(2) The new development absorbs or modifies an existing environment, and so before it can be designed it is necessary to find out about that environment. It is also necessary to do research of the trends of population growth, the distance from work to home, the preferences for different types of dwelling, the amount of sunshine in rooms, the degree of atmospheric pollution and so on. After the survey is complete a forecast of future development is made in the form of a map, or series of maps: the master plan or development plan. As no one can be certain when the development is to take place and since a society is an organic thing, with life and movement, the plan of a city must be flexible so that it may extend and renew its dwellings, reconstruct its working places, complete its communications and avoid congestion in every part.

(3) The plan is never a complete and fixed thing, but rather one that is continually being adapted to the changing needs of the community for whom it is designed. Until quite recent years town plans were always made as inflexible patterns, but history has shown that a plan of this description inevitably breaks down in time.

(4) The flexible plan, preceded by a survey, is one of the most revolutionary ideas that man has ever had about the control of his environment.

(5) Most towns today have a characteristic functional pattern as follows: a central core containing the principal shopping centre, business zones, surrounded by suburbs of houses. Most town planners accept the traditional town pattern. In the preparation of a master plan they are preoccupied with the definition of the town centre, industrial areas, and the areas of housing; the creation of open space for recreation, the laying down of a pattern of main roads which run between the built-up areas (thus leaving them free of through traffic) and connect them to each other.

(6) The master plan thus has to define the ultimate growth of the town, but though the master plan is a diagram, and even a flexible one, it is the structure upon which all future development is to take place.

Вопросы и задания:

3. Translate the following word combinations. Compose sentences with them on the topic of the text

business zone, town pattern, population growth, development plan, road system, plan making, town planner, housing area, shopping centre, business centre, public transport, recreation area.

4. Mark which sentences give the main idea of the text. Prove your opinion

1. In the preparation of the master plan it is necessary to define the town zones. 2. All cities should have a plan. 3. Before a flexible plan is made it is necessary to find out about the existing environment. 4. The master plan also defines places for active and passive recreation.

5. What sentences are the titles of the certain paragraphs? Put them in order Add titles for the rest paragraphs

1. Features of the traditional town pattern.
2. The purpose of a master plan.
3. The purpose of a town plan.
4. What main points should be included in a survey.

6. Finish these sentences with suitable variant according to the text. Add some more information from the text to each sentence

1. The purpose of a town plan is...
 - a) to do research of the trends of population growth;
 - b) to give the greatest possible freedom to the individual;
 - c) to find out about the existing environment.
2. Before a town plan is designed, it is necessary...
 - a) to renew and extend the dwellings, reconstruct the working places;
 - b) to make a forecast of future development in the form of a map or a series of maps;
 - c) to find out about the existing environment.
3. History has shown that a plan should be flexible, because. ..
 - a) it should continually be adapted to the changing needs of the community for whom it is designed;
 - b) it defines the position of schools, shopping centres and social centres;
 - c) it suggests the routes of public transport.
4. The master plan has to define the ultimate growth of the town and...
 - a) no one can be certain when the development is to take place;
 - b) a society is an organic thing with life and movement;
 - c) therefore it is the structure upon which all future development is to take place.
5. In the preparation of a master plan the planners are preoccupied with...
 - a) the idea that in our time plan-making has become an everyday activity;
 - b) the definition of the town pattern and the laying down of a pattern of main roads;
 - c) the necessity to determine the distance from work to home.

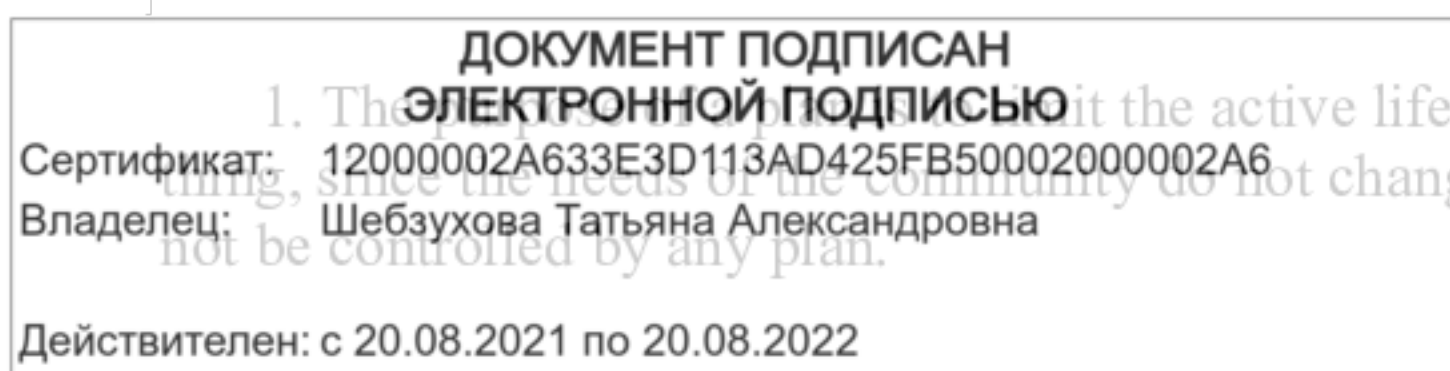
7. Define correct answers to the following questions . Prove your opinion

1. Why is it necessary to make a survey of the existing environment?
 - a) It is because no one is certain when the development is to take place;
 - b) It is because the new development absorbs or modifies the environment;
 - c) It is because growth is a law of life.
2. What does a survey consist in?
 - a) It consists in completing the town's communications;
 - b) It consists in finding out about the environment, in research into the trends of population growth and the types of dwellings; and into atmospheric pollution as well;
 - c) It consists in defining a place for recreation

8. Correct these statements if they are wrong. Using them as a plan speak briefly on the topic of the text.

Model: Most town planners suggest quite new town patterns.

No, they don't. Most town planners do not suggest quite new town patterns. As the text says, most town planners accept the traditional town pattern.



1. The town plan is a complete and fixed thing, since the needs of the community do not change. 2. The plan is a complete and fixed thing, since the needs of the community do not change. 3. Growth is a law of life and town growth should not be controlled by any plan.

Практическое занятие №15.

Тема 15. The Basic Problems of a Building Material's Industry / Основные проблемы производства строительных материалов.

Цель: Формирование коммуникативных компетенций, овладение лексикой и грамматикой

Знать:

- основные способы работы над языковым и речевым материалом;
- лексико-грамматический минимум в объеме, необходимом для работы с иноязычными текстами в процессе профессиональной деятельности;
- лексику профессиональной направленности;
- нормы употребления лексики английского языка в профессиональной сфере

Уметь:

- осуществлять профессиональную коммуникацию в устной и письменной формах на английском языке;
- читать и переводить специальную литературу для пополнения профессиональных знаний;
- изъясняться на бытовые и профессиональные темы; выступать публично (с предварительной подготовкой) с сообщениями и докладами;
- аннотировать, реферировать, переводить литературу по специальности на иностранном языке

Актуальность темы: обусловлена необходимостью овладением УК-4

Теоретическая часть:

Vocabulary:

1. **industrial construction** – промышленное строительство
2. **facility** n – средство, удобство
3. **govern**, v – управлять
4. **building industry** – строительная промышленность
5. **durability**, n] – долговечность
6. **obtain**, – получать
7. **search**, v, n – искать, поиск
8. **accuracy**, n – точность
9. **by end error** – методом проб и ошибок
10. **ratio**, n – соотношение
11. **simulate**, v – моделировать
12. **technical** – технический прогресс
13. **challenge**, n – задача
14. **as yet** – пока, все еще
15. **matter**, n – вещество, материя
16. **strength**, n – сила, прочность

17. **withstand** (withstood, withstood), v – выдерживать,
18. **property**, n – свойство
19. **error**, n – ошибка
20. **strain**, n – натяжение, нагрузка
21. **stress**, n – давление, напряжение
22. **enable**, v – давать возможность (сделать что-либо)
23. **reliably**, adv – надежно
24. **ultimately**, adv – окончательно
25. **huge loads** – огромные грузы, нагрузки
26. **grain**, n – зерно
27. **furnace**, n – печь
28. **powder**, n – порошок
29. **sinter**, n – шлак, сплав
30. **save**, v – беречь, спасать
31. **spray**, v – распылять
32. **fine**, adj – мелкий

Read text “The Basic Problems of Building Materials Industry”.

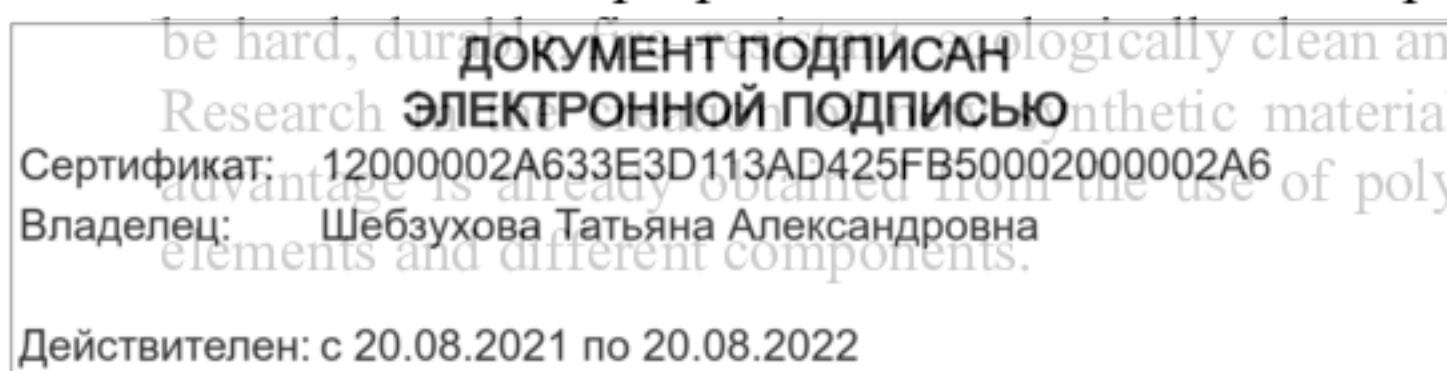
Building industry including residential, public and industrial construction holds a considerable place in the national economy and is being carried on a large scale. It is the largest industry in the country. The problems of construction have grown into major, political issues in most countries.

The evolution of techniques is conditioned by economic factors – the search for a maximum of stability and durability in building with a minimum of materials, labour, time and at low cost.

Technical progress is now impossible without high-quality building materials. Success in this field depends on the achievements of physics, chemistry, mathematics, and other sciences. Building materials that are used for structural purposes should meet several requirements. In most cases it is important that they should

be hard, durable, fire-resistant, technologically clean and easily fastened together.

Research in the field of synthetic materials is being constantly continued. A great economic advantage is already obtained from the use of polymer and plastic materials in a number of structural elements and different components.



Nowadays, many processes of man's activities can be mathematically described and, therefore, technical facilities are used to simulate these processes automatically. Automation makes it possible not only to free man from doing various operations but also to perform these operations with a greater speed and accuracy. During the 20th century several entirely new class of building materials appeared. These are different kinds of plastics, synthetic rubbers, reinforced concrete and others. Most new materials were discovered by complete accident, some by trial and error. For example, technologists take some metals mixing them together in certain ratios and temperature and observing what comes out. The process of studying a material's behavior under pressure, at high and low temperature, in and out of magnetic and electric fields and other conditions can take years and decades. However, recent advances in computing and mathematical methods make it possible to simulate the properties of building materials. The simulations begin with the advance of quantum mechanics that govern the matter on the atomic and subatomic level. The work that used to take years now can be done much quicker. Thanks to the new achievements in computing technology and design, it makes complex calculations much easier. Where the simulations work, they bring a great change to materials development and research. Thanks to the new simulation technology, the 21st century will get new materials to solve various construction purposes. Building materials with universal properties are yet the challenge of the future.

The Great Galileo considered the science of materials strength as one of the basic engineering disciplines. Technologists and designers have to produce building materials capable of withstanding cosmic cold and vacuum, great strains and stresses. To be sure, there were also errors and tragedies when buildings fell in, machines broke down or bridges collapsed.

The problems of strength of materials are hidden in the mysteries of atomic and molecular structure. Another new discipline is being created. Called the mechanics of destruction it'll enable us to design machines, structures and mechanisms that function reliably. Further development of the science of strength will ultimately result in delicate bridges, light airy buildings, small but powerful machines capable of carrying huge loads.

Another achievement of our technologists is the creation of super hard materials. Powder metallurgy helps to obtain such materials. The operational principle of powder metallurgy is well known – an article of necessary size is modelled, in a mound, out of very small metal grain and put into an electro thermic furnace where the grains get sintered together.

There is another method when powder is sprayed onto metal parts. The spraying of powder on articles made of usual steel makes them highly heat –resistant and much stronger. Their reliability and length of service increase. The powder is pressurized, melted and sprayed in a thin layer on different metal parts.

Such a coating makes metal corrosion–resistant for a long period. Humanity was entering an age of high speeds, pressures and standards, which could be generated and withstood only with the help of new and universal materials.

Вопросы и задания.

Exercises 1. Use the words from the active vocabulary and put them into the gaps.

1. Cement is a fine... . 2. Building materials differ in hardness, ... and fire resistance. 3. To...the universal properties of the building materials is the ... of the future. 4. Engineers have to avoid ... in design and constructions. 5. New materials ... high pressure and stress. 6. Reinforced concrete offers technical...over traditional post-and-beam constructions. 7. A great economic advantage is ... from the use of polymer and plastic materials. 8. Automation makes it possible to perform operations with a greater speed and 9. There is another method when powder is ... onto metal parts. 10. ... used instead of bricks in construction is the most cost-effective way to save money spent on building materials.

Exercise 2. Match the words from the columns.

- | | |
|----------------|--------------|
| 1. achievement | a) развитие |
| 2. to create | b)разрушение |
| 3. development | c) создавать |
| 4. strength | d)достижение |
| 5. destruction | j)принцип |
| 6. to simulate | e)прочность |

7. stress

8. research

9. collapse

10 principle

ДОКУМЕНТ ПОДПИСАН

ЭЛЕКТРОННОЙ ПОДПИСЬЮ

Сертификат: 12000002A633E3D113AD425FB50002000002A6

Владелец: Шебзухова Татьяна Александровна

Действителен: с 20.08.2021 по 20.08.2022

Exercise 3. Answer the following questions:

1. What materials are yet a challenge of the future?
2. What are the most important properties of building materials?
3. What new building materials have chemists created?
4. What helps eliminate mistakes in design and construction?
5. What new discipline is being created and why is it necessary?
6. Where are the problems of strength of materials hidden?
7. Is simulating a new way of creating materials?
8. What makes it possible to simulate the properties of building materials?

Exercise 4. Speak about the Basic Problems of building materials using expressions.

I'm going to speak about ...

The text is about ...

I'll start by saying that ...

Now just a few words about ...

One of the main problem is ...

We shouldn't forget that ...

In conclusion I'd like to say that ...

The problem of the text is of the great importance ...

To sum it up ...

**ДОКУМЕНТ ПОДПИСАН
ЭЛЕКТРОННОЙ ПОДПИСЬЮ**

Сертификат: 12000002A633E3D113AD425FB50002000002A6

Владелец: Шебзухова Татьяна Александровна

Действителен: с 20.08.2021 по 20.08.2022

Практическое занятие №16.

Тема 16. Modern Building Materials/ Современные строительные материалы.

Цель: Формирование коммуникативных компетенций, овладение лексикой и грамматикой

Знать:

- основные способы работы над языковым и речевым материалом;
- лексико-грамматический минимум в объеме, необходимом для работы с иноязычными текстами в процессе профессиональной деятельности;
- лексику профессиональной направленности;
- нормы употребления лексики английского языка в профессиональной сфере

Уметь:

- осуществлять профессиональную коммуникацию в устной и письменной формах на английском языке;
- читать и переводить специальную литературу для пополнения профессиональных знаний;
- изъясняться на бытовые и профессиональные темы; выступать публично (с предварительной подготовкой) с сообщениями и докладами;
- аннотировать, реферировать, переводить литературу по специальности на иностранном языке

Актуальность темы: обусловлена необходимостью овладением УК-4

Теоретическая часть:

Modern Building Materials I

Some of the most important building materials are: timber, brick, stone, concrete, metal, plastics and glass. *Timber* is provided by different kinds of trees. Timbers used for building purposes are divided into two groups called softwoods and hardwoods. Timber is at present not so much used in building construction, as in railway engineering, in mining and in the chemical industry where it provides a number of valuable materials.

However, timber is still employed as a building material in the form of boards. For the interior of buildings plywood and veneer serve a number of purposes.

A *brick* is best described as a "building unit". It may be made of clay by moulding and baking in kilns, of concrete, of mortar or of a composition of sawdust and other materials. In shape it is a rectangular solid and its weight is from 6 V₂ to 9 lb.

There exists variety of bricks for different purposes: ordinary, hollow or porous, lightweight, multicolor bricks for decorative purposes, etc. Bricks are usually laid in place with the help of mortar.

The shape and convenient size of brick enables a man to grip it with an easy confidence and, because of this, brick building has been popular for many hundreds of years. The hand of the average man is large enough to take a brick and he is able to handle more than 500 bricks in an eight-hour working day. It is necessary, therefore, for the "would be" bricklayer to practise handling a brick until he can control it with complete mastery and until he is able to place it into any desired position.

The brick may be securely handled by placing the hand over the surface of the upper part of a brick and by placing the thumb centrally down the face of the brick with *the first joints of the fingers¹ on the opposite face. It is better to protect the thumb and the fingers with leather pads, which also prevent the skin from rough bricks.

Sometimes natural stones such as marble, granite, basalt, limestone and sandstone are used for the construction of dams and foundations. Marble, granite and sandstone are widely used for decorative purposes as well, especially with the public buildings.

Natural stone is used for foundations and for the construction of dams. The main varieties of building stone are basalt, granite, marble, sandstone and limestone.

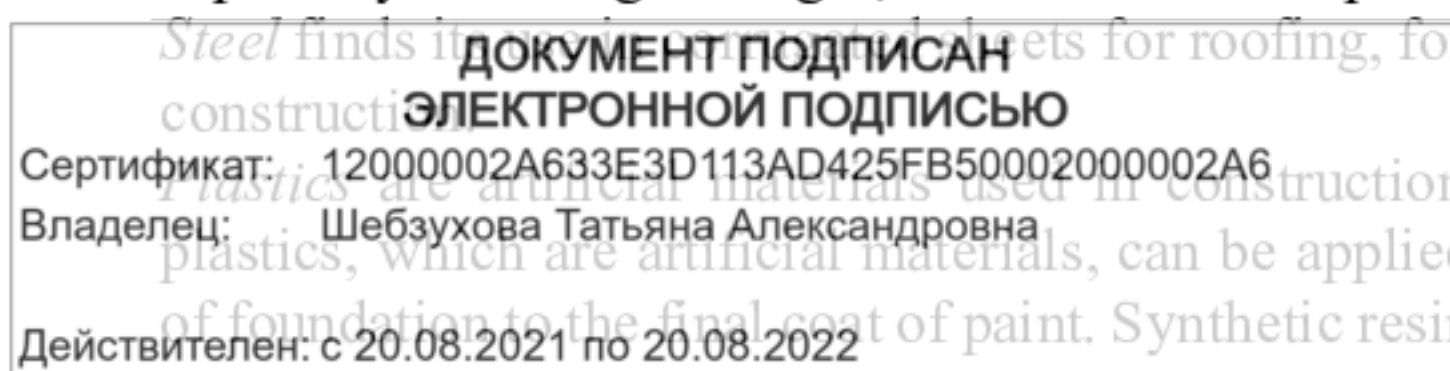
Metals: Aluminium, principally in the form of various alloys, is highly valued for its durability and especially for its light weight, while *brass* is frequently used for decorative purposes in facing.

Steel finds its most important applications for roofing, for girders, frames, etc. Various shapes are employed in

construction work *for a vast number of purposes.² Nowadays

Plastics are artificial materials used in construction to almost every branch of building, from the laying

of foundation to the final coat of paint. Synthetic resins are the main raw material for plastics. Plastics have



some good advantages as they are lighter than metals, not subject to corrosion, *and they can be easier machined.³ Besides, they are inflammable, they can take any color and pattern, and they are good electrical insulators. More over, they possess a high resistance to chemical action.

A lot of decorative plastics, now available, have brought about a revolution in interior and exterior design. But plastics are used now not only for decoration. These materials are sufficiently rigid to stand on their own without any support. They can be worked with ordinary builders' tools.

Laminate is a strong material manufactured from many layers of paper or textile impregnated with thermosetting resins. This sandwich is then pressed and subjected to heat. Laminate has been developed for both inside and outside use. It resists severe weather conditions for more than ten years without serious deformation. As a structural material it is recommended for exterior work. Being used for surfacing, laminate gives the tough surface.

Foamed glass is a high-porosity heat insulating material, available in block made of fine-ground glass and a frothing agent.

Foamed glass is widely used in prefabricated house building, to ensure heat insulation of exterior wall panels, and in industrial construction.

Foamed glass has a high mechanical strength, is distinguished by moisture, vapour and gas impermeability. It is non-inflammable, offers resistance to frost, possesses a high sound adsorption, and it is easily sewn and nailed.

Structural foamed glass blocks designed to fill ceilings, and for making interior partitions in buildings and rooms, to ensure heat and sound insulation.

For insulation mineral wool or cinder wool is often resorted to.

resist [ri'zist]—v сопротивляться

sawdust ['so:dAst] —нопилки

span—n промежуток времени, период времени

subject [sab'drjekt]—v (to) подвергать; подчинять

tensile ['tensail] —adj растяжимый

veneer [vi'nia] —n шпон, фанера

4. Learn to recognize international words. Give Russian equivalents to the following words without a dictionary

industry ['indastri] information [infa'meijn] progress ['prougras] brilliant ['brilj ant] metal ['metal] fact [fekt] operation [apa'reijn]

focus ['foukas] emphasis ['emfasiz] hyperbole [hai'pa:boli] business ['biznis] semester [si'mesta] company ['kmpʌni] enthusiasm [fan' Gju:ziazm]

1. A few explanations to the text.

2. ...the first joints of the fingers — первыми фалангами пальцев

3. .. for a vast number of purposes. — для многих целей

4. .. and they can be easier machined.— их легче обработать.

5. Key vocabulary / expressions

consider [kan' sida] —v рассматривать, обсуждать; обдумывать cross-section ['krosakjn]-n поперечное сечение, поперечный разрез, профиль derive (from)—v получать; извлекать; происходить frothfroG] — пена; вспениться handle [hsendl]- v брать руками, держать в руках impermeability [impэ:пуэ'ЫШ] — и непроницаемость;

герметичность kiln [kiln] —n печь для обжига mortar ['mo^—л раствор plywood ['plaiwuid]—n фанера

resist [ri'zist]—v сопротивляться

sawdust ['so:dAst] —нопилки

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Владелец: Шебзухова Татьяна Александровна

6. A few explanations to the text.

7. the first joints of the fingers — первыми фалангами пальцев

Действителен: с 20.08.2021 по 20.08.2022

8. .. for a vast number of purposes. —для многих целей
9. .. and they can be easier machined.—и их легче обработать.

10. Key vocabulary / expressions

consider [kan' sida] —v рассматривать, обсуждать; обдумывать cross-section ['krosakjn]-поперечное сечение, поперечный разрез, профиль derive (from)—вполучать; извлекать; происходить frothfroG] — пена; вспениться handle [hsendl]- вбрать руками, держать в руках impermeability [impэ:пуэ'ЫIШ] — и непроницаемость;

герметичность kiln [kiln] —n печь для обжига mortar ['mo^—л раствор plywood ['plaiwuid]—n фанера

a) **Phonetic drill**

a) *Read the words keeping in mind different pronunciation of letter c*

[j] sociology, special, official, financial, ancient, depreciation [s] process, concept, perception, recipient, licence, medicine

a) *Mind the stress when reading*

enumeration, atomic, hydraulic, differentiation, appearance, possible, structure, competitor, equipment, military, deployment, specific, customer, competitive, remember, consistency, character, competition, assistant, pneumatic.

b) **Word construction (Different ways to construct words)**

Translate the following words Keeping in mind their suffixes. Memorise the words of the same stem con'
sider—conside' ration — con' siderable — conside'rate re'late — re'lacion — 'relative — 'relatively-
com' pose — ' composite—compo' sition — com' positive tense — tensile — tension

1. *Translate the following words as nouns and as verbs:*

handle, span, crack, hand, bank, stress, place, approach, result, rule, view, house, market, study, progress, host, offer.

2. *Translate the given words keeping in mind that приставка—означает отрицание или отсутствие чего-л.*

non-military, non-inflammable, non-aggressive, non-effective, non-productive, non-alcoholic, non returnable, non forgiving, non efficient.

11. Add the missing parts of the sentences from the text

12. ..for building purposes are divided into two groups called softwoods and hardwoods.

13. However, timber is still employed ...

3 ordinary, hollow or porous, lightweight, multicolor bricks
for decorative purposes, etc.

c) ... they use natural stones such as marble, granite, basalt, limestone and sandstone.

14. .. while brass is frequently used for decorative purposes in facing.

a) These materials are sufficiently rigid to stand...

1 severe weather conditions for more than ten years without
serious deformation.

15. ...to ensure heat insulation of exterior wall panels, and in industrial construction.

16. It is non-inflammable, offers resistance to frost,...

шлаковая вата

преднапряженный бетон

площадь поперечного сечения

выдержать напряжение растяжения (растягивающее напряжение)

a) **Tell the group about any of the building materials you know better about. Add your own information**

b) **Speaking Practice**

b) *Discuss different building materials from the text with your partner finishing the following phrases:*

a) What you need most of all is...

b) Another important thing is...

3.. ..can make a real difference.

4.1 think ... is pretty important too.

b) *Complete each section to make at least 8-10 sentences.*

ДОКУМЕНТ ПОДПИСАН	
ЭЛЕКТРОННОЙ ПОДПИСЬЮ	
Сертификат:	12000002A633E3D113AD425FB50002000002A6
Владелец:	Шебзухова Татьяна Александровна
Действителен: с 20.08.2021 по 20.08.2022	

I	look forward to enjoy love 'd rather	losing meeting finding out missing	problems sightseeing plans delays new ideas
---	-----------------------------------------------	---------------------------------------------	------------------------------------------------------

1. *Speaking Practice. Discuss the topic "My Student's Day" with your partner using such words as*

a technique, to sail through, to stick to, motivation, a long-term goal, to fail in a subject, to work hard at, to make good (poor) progress in, to attend (miss) lectures, to lag behind the group, to combine work with study, to catch up with the group, to take notes at a lecture, to have a place at the hostel (dormitory, residence), grant, tutor, supervisor, term, semester, (undergraduate student, to specialize in, to be expelled from, well-stocked, campus, recruit, a pass, tutorial, finals, extracurricular, to socialize, grade, to coach, to arrange a seminar, to spare time, to contribute one's time to, a seminar (lecture) on . to make it a rule to do smth.

17. Learn the dialogue by heart

Customer. I would like to order a countryside house. Here is the project.

Foreman: Let's see. A two-storey house with a garage. Ten rooms and two staircases. What will the foundation be made of? Concrete?

C: Yes, ferro-concrete.

F.: And what about the walls?

C: I want red brick walls. The windows are large. By the way, the panes should be airtight. I want them to be double-glazing! *F.:* We'll make them hermetic with putty. We put it in the grooves, and then fix the panes.

C: Excellent. The hinges and handles should be bronze.

F.: Ok. What type of roof would you like?

C.: I want the roof to be flat, with a small garden.

F.: Do you have an interior-designer?

C.: Yes, but the drafts aren't ready.

F.: What idea does he have?

C.- There will be a mantelpiece in the hall and the walls will be decorated with panels.

F: Plastic panels?

C: Oh, no. Panels must be made of wood.

F.: What wood do you prefer?

C.; I think oak is the best.

F.: How do you pay the construction?

C: I've got a mortgage for 25 years from the bank.

F.: So we'll make oak panels then.

Практическое занятие №17.

Тема 17. Modern Building Materials

Цель: Формирование коммуникативных компетенций, овладение лексикой и грамматикой

Знать:

- основные способы работы над языковым и речевым материалом;
- лексико-грамматический минимум в объеме, необходимом для работы с иноязычными текстами в процессе профессиональной деятельности;
- лексику профессиональной направленности;
- нормы употребления лексики английского языка в профессиональной сфере

Уметь:

- осуществлять профессиональную коммуникацию в устной и письменной формах на английском языке;
- читать и переводить специальную литературу для пополнения профессиональных знаний;
- изъясняться на бытовые и профессиональные темы; выступать публично (с предварительной подготовкой);

ДОКУМЕНТ ПОДПИСАН
ЭЛЕКТРОННОЙ ПОДПИСЬЮ

Сертификат: 12000002A633E3D113AD425FB50002000002A6

Владелец: Шебзухова Татьяна Александровна

Актуальность темы: обусловлена необходимостью овладения УК-4

Действителен: с 20.08.2021 по 20.08.2022

Modern Building Materials (2)

Concrete is perhaps the most widely spread building material used nowadays. Concrete is an artificial stone, made by thoroughly mixing such natural ingredients or aggregates as cement, sand and gravel or broken stone together with sufficient water to produce a mixture of the proper consistency. It has many valuable properties. It sets under water, can be poured into moulds so as to get almost any desirable form, and together with steel in reinforced concrete it has very high strength, and also resists fire. Prestressed concrete is most widely used at present while prefabricated blocks are employed on vast scale for skeleton structures.

AGGREGATES FOR CONCRETE

By the simple definition from the dictionary "aggregates are the materials, such as sand and small stones, that are mixed with cement to form concrete". In other words *aggregates (or cushioning materials)* can be defined as a mass of practically inert mineral materials, which, when surrounded and bonded together by an active binder, form the rock. This rock is denoted by the general term *concrete*.

Aggregates have three principal functions in the concrete: they provide a relatively cheap filler for the concreting material, or binder; they provide a mass of particles which are suitable for resisting the action of applied loads, of abrasion, of percolation of moisture through the mass, and of climate factors; they reduce volume changes resulting from the action of the setting and hardening of the concrete mass.

All aggregates, both natural and artificial, which have sufficient strength and resistance to weathering, and which do not contain harmful impurities may be used for making concrete.

As aggregates such natural materials as sand, pebbles, broken stone, broken brick, gravel, slag, cinder, pumice and others can be used.

PRESTRESSED CONCRETE

Prestressed concrete is not a new material. Its successful use has been developed rapidly during the last two decades, chiefly because steel of a more suitable character has been produced. Concrete is strong in compression but weak when used for tensile stresses.

If, therefore, we consider a beam made of plain concrete, and spanning a certain distance, it will at once be realized that the beam's own weight will cause the beam to "sag" or bend. This sagging at once puts the lower edge of the beam in tension, and if the cross sectional area is small, causes it to break, especially if the span is relatively large.

If, **on the other hand*, we use a beam of similar cross-section, but incorporate steel bars in the lower portion, the steel will resist the tensile stress derived from the sag of the beam, and thus assist in preventing it from breaking.

In prestressed concrete steel is not used as reinforcement, but as a means of producing a suitable compressive stress in the concrete. Therefore any beam (or member) made of prestressed concrete is • permanently under compression, and is consequently devoid of crack under normal loading, or so long as the "elastic limit" is not exceeded.

Prestressed concrete is not only used for beams but is now employed extensively for columns, pipes, and cylindrical water towers, storage tanks, etc.

A few explanations to the text

Key vocabulary /expressions

on the other hand,—с другой стороны

bend [bend] — вогнуться; гнуться; изгибаться

crack ['kraek] — *n* 1. треск 2. трещина

desire [di'zaia] — и желание; просьба, требование

gravel ['grasvol] — гравий

load [loud] — *n* груз; нагрузка

sag [sasg] — оседать, обвивать; падать"

store ['sto:]— *n* запас; склад; /?/универсальный магазин

tensile ['tensailj]—растяжимый

Phonetic drill. Read the words paying attention to the pronunciation of the italicized letters

[s:]

Purpose virtual certain work

urgent might attempt worse
burden ЭЛЕКТРОННОЙ ПОДПИСЬЮ worship

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Word construction (Different ways to construct words)

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Write out the italicized words from the text and translate them without a dictionary

Translate the following words Keeping in mind their suffixes Memorise the words of the same stem
 em' ploy—employ' ee—em' ployer—em' ployment 'nature — 'natural — 'naturally compress—
 compressor—compression

Add the missing parts of the sentences from the text

...to produce a mixture of the proper consistency.

Concrete is an artificial stone, made by thoroughly...

...they provide a relatively cheap filler for the concreting material, or binder;...

18. This sagging at once puts the lower edge...

5—as a means of producing a suitable compressive stress in the concrete.

...any beam made of prestressed concrete is permanently under compression...

19. This sagging at once puts the lower edge....

20. Find in the text equivalent Russian phrases to the following English

a relatively cheap filler

the proper consistency

resistance to weathering

spanning a certain distance

the cross-sectional area

negotiated fee

21. Find in the text equivalent English phrases to the following Russian

вредные примеси

удачное использование

цементируемый материал

искусственный камень

быть постоянно под напряжением

заполняющие материалы

22. Speaking Practice. Switch on your imagination.

1. Complete the sentences

d) The worst thing for me is...

e) What I love most is...

f) The best thing for me is...

g) What I hate most...

2. Let's talk a bit

23. Why is concrete more fit for foundation?

24. What floor covering is the best?

25. What colour should bedroom walls be? (kitchen walls, living- room walls)

26. What should a chimney be made of?

27. Why is it nice to have a mantelpiece?

28. What timber is considered to be the best for the window frames?

29. What professionals does a construction team need?

30. We continue enlarging your vocabulary. International words:

ventilation [ventileijn]	portion ['po:Jn]
hermetic [ha'metik]	compression [kam'prejn]
stress [stres]	mass [mass]
mineral [тшпэгэ1]	limit [limit]
cylinder ['silinda]	block [blok]
elastic [i'lsestik]	tank [taerjk]
subordination [s3bo:di'neiJn]	skeleton ['skelitn]

Практическое занятие №18.

Тема 18. **ДОКУМЕНТ ПОДПИСАН ЭЛЕКТРОННОЙ ПОДПИСЬЮ**
 Сертификат: 12000002A633E3D113AD425FB50002000002A6
 Владелец: Шебзухова Татьяна Александровна
 Цель: Формирование коммуникативных компетенций, овладение лексикой и грамматикой
 Действителен с 20.08.2021 по 20.08.2022

Классификация строительных материалов.
Metals / Металлы, Timber /

Цель: Формирование коммуникативных компетенций, овладение лексикой и грамматикой

- основные способы работы над языковым и речевым материалом;
- лексико-грамматический минимум в объеме, необходимом для работы с иноязычными текстами в процессе профессиональной деятельности;
- лексику профессиональной направленности;
- нормы употребления лексики английского языка в профессиональной сфере

Уметь:

- осуществлять профессиональную коммуникацию в устной и письменной формах на английском языке;
- читать и переводить специальную литературу для пополнения профессиональных знаний;
- изъясняться на бытовые и профессиональные темы; выступать публично (с предварительной подготовкой) с сообщениями и докладами;
- аннотировать, реферировать, переводить литературу по специальности на иностранном языке

Актуальность темы: обусловлена необходимостью овладением УК-4

Теоретическая часть:

Vocabulary

1. **enormous, adj** огромный
2. **output, n** выпуск
3. **cost price** себестоимость
4. **bearing, a** несущий
5. **plane, n** [плоскость]
6. **auxiliary, a** вспомогательный
7. **precast prestressed concrete** сборный предварительно напряженный бетон
8. **permeability** проницаемость
9. **liquid, n** жидкость
10. **evaluate, v** оценивать
11. **ability, n** способность
12. **impact, n** удар
13. **involve, v** включать
14. **penetration, n** проникание
15. **as yet** пока, всё еще
16. **challenge, n** . задача

Text “Classification of Building Materials”.

1. Great possibilities are open to our architects and builders by using modern building materials, achievements in science and technology in building. The importance of the building industry in our national economy is enormous as its output governs both the rate and the quality of construction work. The main current tasks are to speed up the development of the building materials industry and to decrease steadily the cost price of manufacture and the special capital investments.
2. As to the application all building materials are divided into three groups :a) main building materials such as rocks and artificial stones, timber and metals, which are used for bearing structures. b) Binding materials such as lime, gypsum and cements, which are used for jointing different planes. c) Secondary or auxiliary materials, which are used for interior parts of the buildings, such as tiling, synthetic linoleum, coatings and other facing materials.
3. If the materials do not require any technological changes in their chemical structure they are called natural building materials. These are: stone, clay, sand, lime, timber. Many of these materials have been known from time immemorial. Thus, the ancient Pyramids were constructed of stone. Stones are strong, durable, weatherproof and some of them are so attractive that the walls constructed of them don't need any special finish. Cement, concrete, reinforced concrete, plastics and others are examples of artificial building materials. The great discoveries of our time in physics, chemistry, and other sciences make it possible to create new building materials.
4. The properties of building materials are generally classified as physical, chemical and mechanical. Physical properties of materials include their characteristics relating to weight and density. Chemical properties of materials are essentially evaluated by their resistance to acids, alkalis and salt solutions. The ability of materials to resist compression, tension, impact, penetration by a foreign body and other actions involving force, are generally known as mechanical properties.
5. Along with

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ЭЛЕКТРОННОЙ ПОДПИСЬЮ
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6. As to their qualities, building materials should be durable, strong, water resistant, acid-resistant heat resistant, etc. Some of them should also have a pleasant appearance. Materials with universal properties are as yet a challenge the future.

Exercise 1. Find the English equivalents for the following word combinations in the text.

Exercise 2. Scan the text and write the number of the paragraph that deals with the following topics.

- a) the application of building materials
- b) the properties of building materials
- c) the importance of building materials industry
- d) the qualities of building materials
- e) the traditional and the newest building materials
- f) natural and artificial building materials

Перечень основной литературы:

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- файлат: 12000002A633E3D113AD425FB50002000002A6

- Имя: Шебзухова Татьяна Александровна

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МИНИСТЕРСТВО НАУКИ И ВЫСШЕГО ОБРАЗОВАНИЯ
РОССИЙСКОЙ ФЕДЕРАЦИИ
Федеральное государственное автономное
образовательное учреждение высшего образования
«СЕВЕРО-КАВКАЗСКИЙ ФЕДЕРАЛЬНЫЙ УНИВЕРСИТЕТ»
Пятигорский институт (филиал) СКФУ

Методические указания
по организации и проведению самостоятельной работы обучающихся
по дисциплине
«ИНОСТРАННЫЙ ЯЗЫК В СФЕРЕ ПРОФЕССИОНАЛЬНОЙ КОММУНИКАЦИИ»
для студентов направления подготовки
08.03.01 Строительство

**ДОКУМЕНТ ПОДПИСАН
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 2. Технологическая карта самостоятельной работы
 3. Самостоятельное изучение теоретического материала
 4. Методические указания по видам работ, предусмотренных рабочей программой дисциплины
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**ДОКУМЕНТ ПОДПИСАН
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ВВЕДЕНИЕ

Основной целью самостоятельной работы студентов является повышение исходного уровня владения иностранным языком, достигнутого на предыдущей ступени образования, и овладение студентами необходимыми достаточным уровнем коммуникативной компетенции для решения задач межличностного и межкультурного взаимодействия. Изучение иностранного языка призвано также обеспечить:

- повышение уровня учебной автономии и способности к самообразованию;
- развитие когнитивных и исследовательских умений;
- развитие информационной культуры;
- расширение кругозора и повышение общей культуры студентов.

Самостоятельная работа студентов занимает важное место в учебной научно-исследовательской деятельности студентов. Без самостоятельной работы невозможно не только овладение любой вузовской дисциплиной, но и формирование специалиста как профессионала. В широком смысле под самостоятельной работой следует понимать совокупность всей самостоятельной деятельности студентов, как в учебной аудитории, так и в нее, в контакте с преподавателем и в его отсутствие.

Усиление роли самостоятельной работы студентов означает принципиальный пересмотр организации учебно-воспитательного процесса в вузе, который должен строиться так, чтобы развивать умение учиться, формировать у студента способности к саморазвитию, творческому применению полученных знаний, способам адаптации к профессиональной деятельности в современном мире.

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1. ОБЩАЯ ХАРАКТЕРИСТИКА САМОСТОЯТЕЛЬНОЙ РАБОТЫ ОБУЧАЮЩЕГОСЯ ПРИ ИЗУЧЕНИИ ДИСЦИПЛИНЫ

Под самостоятельной работой студентов (СРС) понимается совокупность всей самостоятельной деятельности студентов, как в учебной аудитории, так и за ее пределами, в контакте с преподавателем и в его отсутствие.

Цель самостоятельной работы студента – научиться осмысленно и самостоятельно работать с учебным материалом и научной информацией, овладеть фундаментальными знаниями, умениями и навыками в сферах академической, профессиональной и социально-гуманитарной деятельности, сформировать основы самоорганизации и самовоспитания с тем, чтобы привить умение в дальнейшем непрерывно повышать свою профессиональную квалификацию.

Задачами СРС являются:

- систематизация и закрепление полученных теоретических знаний и практических умений;
- углубление и расширение теоретических знаний;
- формирование умений использовать учебно-справочную литературу;
- развитие познавательных способностей и активности студентов: творческой инициативы, самостоятельности, ответственности и организованности;
- формирование самостоятельности мышления, способностей к саморазвитию, самосовершенствованию и самореализации;
- развитие исследовательских умений;
- использование материала, собранного и полученного в ходе самостоятельных занятий на практических занятиях, для эффективной подготовки к зачетам и экзаменам.

Основными видами самостоятельной работы студентов являются:

- *самостоятельное изучение литературы;*

Цель: самостоятельно детально изучить темы, представленные в рабочей программе.

Задачи: приобретение навыка работы с источниками и литературой; умения грамотно составлять конспекты и пользоваться ими; выявлять различные точки зрения на проблему и степень ее разработанности в литературе.

- *подготовка к практическим занятиям* (выполнение домашних заданий) и к собеседованию по индивидуальным заданиям;

Цель: углубление знания учебного материала.

Задачи: освоить отдельные вопросы в рамках изучаемой дисциплины; грамотность, последовательность и рациональность изложения подготовленного материала во время практического занятия.

- *составление глоссария по тексту.*

Цель: составить базу новых лексических единиц.

Задачи:

- самостоятельная поэтапная отработка учебных элементов;
- развитие практических умений;
- формирование умений использовать информационные источники: справочную и специальную литературу.

Приступая к **самостоятельному изучению литературы** по учебной дисциплине «Профессиональная коммуникация на иностранном языке», необходимо: ознакомиться с рабочей программой; взять в библиотеке рекомендованные учебники и учебные пособия; получить у ведущего преподавателя в электронном виде методические рекомендации к практическим и самостоятельным работам; завести новую тетрадь для конспектирования теоретического материала и выполнения практических заданий.

Для изучения дисциплины предлагается список основной и дополнительной литературы. Основная литература предназначена для обязательного изучения, дополнительная – поможет более глубоко освоить отдельные вопросы в рамках изучаемой дисциплины.

В ходе **подготовки к практическим занятиям** студент обязан осуществлять

конспектирование учебного материала, особое внимание, обращая на теорию, формулировки, раскрывающие сущность понятий, терминов, грамматических и языковых понятий. В рабочих конспектах желательно оставлять поля, на которых следует делать пометки, дополнять материал, формулировать выводы и практические рекомендации.

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Самостоятельная работа студентов над материалом учебной дисциплины является неотъемлемой частью учебного процесса и должна предполагать углубление знания учебного материала, излагаемого на аудиторных занятиях, и приобретение дополнительных знаний по отдельным вопросам самостоятельно.

Конспект темы – письменный текст, в котором кратко и последовательно изложено содержание основного источника информации. Конспектировать — значит приводить к некоему порядку сведения, почерпнутые из оригинала. В основе процесса лежит систематизация прочитанного или услышанного. Записи могут делаться как в виде точных выдержек, цитат, так и в форме свободной подачи смысла.

Индивидуальные задания призваны расширить кругозор студентов, углубить их знания и развить умения исследовательской деятельности, проявить элементы творчества.

Собеседование – средство контроля, организованное как специальная беседа преподавателя со студентом на темы, связанные с изучаемой дисциплиной, и рассчитанное на выяснение объема знаний обучающегося по определенному разделу, теме, проблеме и т.п.

Глоссарий - словарь, который помогает осваивать новые лексические единицы по теме. В глоссарий необходимо добавлять специальную терминологию, аббревиатуры и сокращения, фразеологические единицы и пр.

Каждый вид самостоятельной работы имеет определенные формы отчетности.

В ходе выполнения самостоятельной работы студент должен продемонстрировать сформированность компетенции:

Код	Формулировка:
УК-4	Способен применять современные коммуникативные технологии, в том числе на иностранном(ых) языке(ах), для академического и профессионального взаимодействия

2. Технологическая карта самостоятельной работы обучающегося

Коды реализуемых компетенций, индикатора (ов)	Вид деятельности студентов	Средства и технологии оценки	Объем часов, в том числе		
			СРС	Контактная работа с преподавателем	Всего
2 семестр					
ИД-1 _{УК-4} ИД-2 _{УК-4} ИД-3 _{УК-4}	Самостоятельное изучение литературы по темам 1-18	Собеседование	11,25	1,25	12,5
ИД-1 _{УК-4} ИД-2 _{УК-4} ИД-3 _{УК-4}	Подготовка к практическим занятиям по темам 1-16	Индивидуальные творческие задания	6,75	0,75	7,5
ИД-1 _{УК-4} ИД-2 _{УК-4} ИД-3 _{УК-4}	Составление глоссария по тексту	Собеседование	9	1	10
Итого за 2 семестр			27	3	30
Итого			27	3	30

3. САМОСТОЯТЕЛЬНОЕ ИЗУЧЕНИЕ ТЕОРЕТИЧЕСКОГО МАТЕРИАЛА

Изучение любого раздела следует начинать с ознакомления с вопросами плана изучения темы. При изучении теоретического материала необходимо использовать рекомендуемую основную и дополнительную литературу для лучшего усвоения материала.

<p>Освоение дисциплины осуществляется в соответствии с той последовательностью, которая представлена в плане самостоятельных занятий.</p> <p>ДОКУМЕНТ ПОДПИСАН ЭЛЕКТРОННОЙ ПОДПИСЬЮ</p> <p>Сертификат: 12000002A633E3D113AD425FB50002000002A6</p> <p>Владелец: Шебзухова Татьяна Александровна</p> <p>Действителен с 20.08.2021 по 20.08.2022</p>		<p>необходимо самостоятельно детально изучить представленные темы по рекомендуемым источникам информации:</p> <p>Рекомендуемые источники информации</p>
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п/п	работы	(№ источника)			
		Основная	Дополнительная	Методическая	Интернет-ресурсы
1	Самостоятельное изучение литературы по темам: 1-18	1-3	1-4	1-2	1-6
2	Подготовка к практическим занятиям по темам: 1-16	1-3	1-4	1-2	1-6
3	Составление глоссария по тексту	1-3	1-4	1-2	1-6

Методика работы с литературой предусматривает ведение записи прочитанного в виде плана-конспекта, опорного конспекта и т.д. Это позволит сделать знания системными, зафиксировать и закрепить их в памяти.

Конспект – сложный способ изложения содержания книги или статьи в логической последовательности. Конспект аккумулирует в себе предыдущие виды записи, позволяет всесторонне охватить содержание книги, статьи, текста, грамматического материала. Поэтому умение составлять план, тезисы, делать выписки и другие записи определяет и технологию составления конспекта.

Методические указания по составлению конспекта

1. Внимательно прочитайте текст. Уточните в справочной литературе или словаре непонятные слова. При записи не забудьте вынести справочные данные на поля конспекта;
2. Выделите главное, составьте план;
3. Кратко сформулируйте основные положения текста;
4. Законспектируйте материал, четко следуя пунктам плана. При конспектировании старайтесь выразить мысль своими словами. Записи следует вести четко, ясно.
5. Грамотно записывайте цитаты. Цитируя, учитывайте лаконичность, значимость мысли.

В тексте конспекта желательно приводить не только тезисные положения, но и их доказательства. При оформлении конспекта необходимо стремиться к емкости каждого предложения. Мысли автора книги следует излагать кратко, заботясь о стиле и выразительности написанного. Для уточнения и дополнения необходимо оставлять поля.

Процедура проверки конспекта включает в себя перечень вопросов базового и повышенного уровней для собеседования.

Методические рекомендации по представлению и оформлению результатов собеседования

Собеседование представляет собой индивидуальную беседу с каждым студентом по предложенным вопросам с последующей оценкой их подготовки. Целью данной формы занятия является осуществление текущего контроля знаний по теме. В задачи собеседования входит приобретение навыка работы с источниками и литературой; умения грамотно составлять конспекты и пользоваться ими; выявлять различные точки зрения на проблему и степень ее разработанности в литературе.

Собеседование предполагает обязательное конспектирование текста или грамматического материала, а также проработку всей предложенной литературы по теме.

Вопросы для собеседования и критерии оценивания приведены в ФОС данной дисциплины.

4. МЕТОДИЧЕСКИЕ УКАЗАНИЯ ПО ВИДАМ РАБОТ, ПРЕДУСМОТРЕННЫХ РАБОЧЕЙ ПРОГРАММОЙ ДИСЦИПЛИНЫ

4.1. Подготовка к практическим занятиям

Методические указания по подготовке к практическим занятиям.

К самостоятельной работе относится подготовка к практическому занятию и выполнение домашнего задания.

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Домашнее задание состоит из индивидуальных заданий, процедура проверки которых включает в себя перечень практических упражнений и вопросов для собеседования. Итоговый продукт самостоятельной работы: индивидуальное задание. Средства и технологии оценки: собеседование.

4.2. Методические указания по составлению глоссария по тексту

Подобно любому словарю глоссарий состоит из автономных лексических единиц, расположенных:

- по алфавиту;
- по мере появления терминов в тексте или задании;
- в соответствии с темой изучаемого раздела дисциплины.

Для составления глоссария по заданной теме нужно найти информацию с разных источников (сеть Internet, энциклопедии, практические пособия, учебная литература), изучить ее и составить в рукописном варианте или пользуясь текстовым процессором.

Работа должна быть представлена на бумаге формата А4 в печатном (компьютерном) или рукописном варианте.

Каждая лексическая единица записывается на отдельной строчке. В состав ее характеристики должны входить не только краткое толкование, но и комментарии, примеры, поясняющие цитаты, ссылки на литературу. Главным отличием глоссария от обычных словарей является формирование его в качестве единого комплекса информации в соответствии с исследовательской или практической задачей.

Рекомендации по составлению глоссария:

- **Главное правило глоссария – достоверность.** Пояснение должно наиболее точно отражать суть лексической единицы.
- **Пояснение должно быть корректным и понятным.** Нельзя использовать откровенные жаргонизмы, но и слишком сложный научный текст может только запутать пользователя.
- **Учитывать все варианты.** Если один и тот же термин может иметь несколько равнозначных значений, нужно учитывать все варианты, и на конкретных примерах приводить значение термина в том или ином контексте.

Итоговый продукт самостоятельной работы: словарная статья.

Средства и технологии оценки: собеседование.

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