ФЕДЕРАЛЬНОЕ ГОСУДАРСТВЕННОЕ БЮДЖЕТНОЕ ОБРАЗОВАТЕЛЬНОЕ УЧРЕЖДЕНИЕ ВЫСШЕГО ОБРАЗОВАНИЯ «ОРЕНБУРГСКИЙ ГОСУДАРСТВЕННЫЙ АГРАРНЫЙ УНИВЕРСИТЕТ»

МЕТОДИЧЕСКИЕ МАТЕРИАЛЫ ДЛЯ ОБУЧАЮЩИХСЯ ПО ОСВОЕНИЮ ДИСЦИПЛИНЫ

Б1.О.01 Иностранный язык

Направление подготовки (специальность) 09.04.01 Информатика и вычислительная техника

Профиль образовательной программы Автоматизированные системы обработки информации и управления

Форма обучения очная

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1.1.1. Перечень и краткое содержание рассматриваемых вопросов:
1. Моя специальность. № 1

Чтение: Моя специальность. Плюсы и минусы работы ИТ-специалиста. Лексика: Лексическийминимумпотеме «Мояспециальность» (Letmeintroducemyself, surname (lastname), to be born, to be situated, to go in for… , to be interested in…, to do well, to want to be (become), be good at , to enjoy/ to like, tobekeen, computertechniques, software, tomanage, demand, freelanskills and personal qualities, high paying salary).Говорение: обучение монологической и диалогической речи по теме "Я - студент". Чтениеипереводтекста:

Let me introduce myself. My name is Alex, my surname is Voronin. I am seventeen years old. I was born on the 2nd of October in 2001 inOrenburg. I love sport and music. I go in for football and hockey. I like to listen to modern music and dance. I dance a lot and I hope I`m good at it.

This summer I have graduated from the University. I did well in all the subjects but my favourite were Computer Science and Mathematics. I also enjoyed English lessons. I am very interested in learning English because I want to be a successful specialist. I think that knowledge of foreign language helps in everyday life and career.

Now I am a first-year undergraduate student of Institute of Risk Management and Integrated Security. It trainsIT specialists and safety engineers. I am a full-time student and study in the day time. I do not work. I get a scholarship. Our lectures begin at 8 o'clock. Every day we have about 2 lectures and seminars. The break between the lectures lasts 25 minutes. I attend all the lectures and classes.

In the future, I want to be an IT specialist because I am keen on trying computer techniques and working with computers is always fun and exciting for me.

People withprofessionin the career field of IT use computers, software, networks, servers, and other technology to manage and store data. There is growing demand in the field of information technologies nowadays.

It is important to understand that the work of the IT specialist can be different: some of them work for a small agency, some for a big company, others are freelance or have their own business. I'd like to work for a big company.

In order to be a successful IT specialist you must possess some skills and personal qualities. The most important ones are the following: being able to think logically, love to solve problems, persistence and patience. An IT specialist must be able to find the most efficient way to solve the problem.

I want my future job be interesting and well-paid.People say that money isn't everything, but it certainly does help because it gives independence and freedom. I'd like to combine a good satisfying job with a high paying salary.

Работа над содержанием текста. Выполнение после текстовых упражнений и по закреплению лексического материала по теме.

Формы текущего контроля по теме: письменный опрос, лексико-грамматический тест.

2. Грамматика. № 1

Грамматика: Повторение видовременных форм глаголов в английском языке.

1.2. Тема 2: «Приветствие, слова при прощании, благодарность. Разговор с зарубежным партнером. Виды деловых писем» (18 часов).

1.2.1 Перечень и краткое содержание рассматриваемых вопросов:

1. Деловая поездка.Структура и оформление деловых писем№ 2

Чтение: Деловаяпоездка.Структураиоформлениеделовыхписем.Лексика:**I. Словаивыражияпотеме:**

ticket	билет
a return ticket	билет туда и обратно
an opendate ticket	билет с открытой датой
to fly	летать, лететь
flight	полет. Рейс
to fly back	лететь обратно
to check	проверить
to pay in cash	платить наличными
check in	регистрация
The plane is due to depart at 7 a. m	самолет должен отправляться в 7 часов утра
in one hour prior to the departure	за один час до отправления
the expected time	ожидаемое время
time difference	разница во времени
service	служба, услуга
to be at one's service	быть к чьим-либо услугам
to fill in	заполнять
to wake up	просыпаться, будить
to order	заказывать
key	ключ
to reserve	резервировать, бронировать (номер в гостинице)
to check out	освободить номер в гостинице
to make out a bill	выписать счет

Говорение: обучение монологической и диалогической речи по теме "Деловая поездка ". Чтениеипереводдиалогов:

Buyingaticket

- Goodmorning. WhatcanIdoforyou?
- I'mgoing to fly to NewYork. Tell me, please, if Ican buy a ticket for a flight

on Monday, next week?
- Do you want a returnticket, sir?
- Yes.
- When are you going tofly back?
 - I'd like to buy an opendate ticket.
- What class do youwant to fly?
- I'd prefer economyclass.
- Just a moment, sir. I'llcheck if there are any available seats... Yes, there are a few economy seats left ona flight SU 315.
- Fine. How much is it?May I pay in cash?
- Yes, we accept cash.What is your name, sir?
- Victor Pospelov.
- Here are your tickets,please.
- When does the checkin begin?
- The plane is due to depart at 7 a.m., so you are tocheck in one hour prior to the departure that is at 6a.m.
-And what time does itarrive to New York?
- The expected time ofarrival to JFK airport is 2p.m. local time. There is eight hours time differencebetween Moscow and NewYork.

At the Airport Hotel

- Good evening.
- Good evening, sir. I'mat your service.
- I'd like a single roomfor one night only. I fly backhome tomorrow morning.
- All right, sir. Fill inthis form, please. Writeyour name and your address here.
- Could you wake me upat seven o'clock?
- Certainly, sir. Wouldyou like our restaurantroom service to bring you breakfast?
- Yes, I'd like to.
- You can order yourbreakfast by telephone fromyour room. Here's your key, sir. Room 312 is on thethird floor. The lift (Aм.*elevator)* is on the right.
- Thank you very much.

Checking in

- Good evening. I havereserved a single room forthree days at your hotel.
- What is your name,please?
- Mr. Smith.
- Yes. We've reserved aroom for you. It is room275. It's quiet and comfort able. Will you register,please? Here are the forms.
- How much do I pay?
- Ninety dollars a dayplus tax. How will you pay?
- Can I pay with a creditcard?
- Sure. The porter willtake your suitcases andshow you up to your room.
- Thank you.

Checking out

- I'm checking out tomorrow. Could you, please,make out the bill?
- Just a moment, please.Here's your bill for theapartment, telephone and room service.
- How can I pay?
- You can pay here withyour credit card.
- Could you send mysuitcases down tomorrow?
- Certainly, sir. How didyou like staying at our hotel?
- I liked the service andthe meals in your restaurantwere excellent.
- I'm glad you liked ithere. I hope you will stay atour hotel again next time when you come to our city.

Работа над содержанием диалогов.Выполнениелексических упражнений. Развитие навыков письменной речи. Написание деловыхписем. Обсуждение темы «Типы писем. Общие правила написания делового письма».Выполнение упражнений. Развитие навыков перевода. Формирование иразвитие навыков письменной речи.

Деловое письмо состоит из 9 элементов:

1. Date	Дата
2. The internal address – name and address of the person, to whom the letter is directed	Внутренний адрес - имя и адрес лица, которому адресуется письмо
3. Polite greeting	Вступительноеобращение — приветствие.
4. Subject of the letter	Указание на содержание письма или о чем оно (не обязательно)
5. Text of the letter – the essence of a question	Текст письма – изложение сути вопросов
6. Polite "Good-bye"	Заключительная формула вежливости – «до свидания»
7. Signature	Подпись
8. Enclosures	Указаниенаприложение
9. Copies	Указаниенакопии

Выражения, использующиеся при оформлении делового письма:

With reference to your (our) letter of	Ссылаясь на Ваше (наше) письмо от
Referring to your (our) letter of	Ссылаясь на Ваше (наше) письмо от
We refer to your (our) letter of	Мы ссылаемся на Ваше (наше) письмо от
We revert to our letter of	Мы возвращаемся к нашему письму от
We are pleased to send you	С удовольствием посылаем Вам
We enclose	Мы прилагаем
We attach	Мы прилагаем
Yours faithfully	С уважением, искренне Ваш
Sincerely yours	С уважением, искренне Ваш
Yours truly	Искренне Ваш

Образецрасположенияэлементовписьма

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1 Дата

Nov. 10, 200…

2. Внутреннийадрес
Mr. George Ganson
113 Carpenter Ave, 11579
Sea Cliff, NY, USA
3. Приветствие
Dear Mr. Ganson,
4. Темаписьма
Re: Offer of goods

5.Текст письма
 Thank you very much for your offer of goods sent to us.
 We shall keep you informed as to our decision concerning the terms and conditions of your letter.
6. Заключительная формула вежливости
Verytrulyyours,

7. Подпись
J.B. Priestly

8. Указание на приложение
2Enclosures
9. Указание на копии.
cc: J. Smith

Обучение деловому письму по теме "Структура и оформление деловых писем ". Чтениеипереводписем:

HOWARD and PRATT
 Ladies' Clothing
306, 3d Avenue
Chicago, Ill. 60602

USA

Oct. 21, 2000

 JACSON and MILES
118 Regent Street
London W1C 37D
UK

      Gentlemen:
    We saw a collection of women's dresses in your October catalogue. The lines
    you showed would be most suitable for our market.
        Would you kindly send us your quotation for clothing that you could

supply
to us by the end of November?
We would require 1,000 dresses in each of the sizes 10-14, and 500 in sizes
8 and 16.
We propose the payment made by Letter of Credit.
Thank you for an early reply.

Very truly yours,

P. PRATT, Jr
(P. Pratt)
Buyers

HOWARD and PRATT
Ladies' Clothing
306, 3d Avenue
Chicago, Ill. 60602
USA

Nov. 4, 2000

JACSON and MILES
118 Regent Street
London W1C 37D
UK

Gentlemen:
Re: Order of Goods
Thank you for your quotation for October 28. We have pleasure in placing an order with you for 1,500 dresses to the amount of US $ 38,745 in the colours and sizes specified below:
Quantity
Size
Colour
Price per unit
Amount
Delivery: air freight, c.i.f., Chicago
A Letter of Credit will be opened by us with your bank as soon as we receive your confirmation of order.
Please arrange for immediate shipment by air freight.
Very truly yours,

P. PRATT, Jr
(P. Pratt)
Buyers

Работа над содержанием писем. Выполнение после текстовых упражнений и по закреплению лексического материала по теме.

2. Грамматика. № 2

Страдательный залог.

1.3. Тема 3: «Программное обеспечение. Тип программного обеспечения.» (18 часов).

1.3.1 Перечень и краткое содержание рассматриваемых вопросов:

1. **Базовое программное обеспечение**. № 3

Чтение: Базовоепрограммноеобеспечение. Лексика: Лексическийминимумпотеме «Базовоепрограммноеобеспечение» (aid, to attach, developer, equipment, generalpurpose, internal, mainboard,memory capacity,peripheral,

regard, regardless, security, specific, to boot up,to check, to complete, to conduct). Формирование и развитие навыков письменной речи.Написание аннотации по теме «Базовоепрограммноеобеспечение».Говорение: обучение монологической и диалогической речи по теме "Базовое программное обеспечение". Чтениеипереводтекста:

Software. Typesofsoftware

Softwareisthemostimportantcomponentofcomputersystem. Withoutsoftware, a computer turns into a dead body – a dead slave!

Software is a set of programs, procedures, algorithms and its documentation concerned with the operation of a data processing system. Thus the software contains the instructions that tell a computer what to do and how to do to solve a specific problem.

Computers can input, calculate, compare, and output data as information. Software determines the order in which these operations are performed.

Programs usually fall in one of two categories: system software and applications software.

System software controls standard internal computer activities. An operating system, for example, is a collection of system programs that aid in the operation of a computer regardless of the application software being used. When a computer is first turned on, one of the systems programs is booted or loaded into the computer's memory. This software contains information about memory capacity, the model of the processor, the disk drives to be used, and more. Once the system software is loaded, the applications software can start to work.

System programs are designed for the specific pieces of hardware. These programs are called drivers and coordinate peripheral hardware and computer activities. User needs to install a specific driver in order to activate his or her peripheral device. For example, if you intend to buy a printer or a scanner you need to worry in advance about the driver program which commonly go along with your device. By installing the driver you «teach» your mainboard to «understand» the newly attached part.

Applications software satisfies your specific need. The programmers nowadays tend to include as much as possible in one program to make software interface look more attractive to the user. This class of programs is the most numerous and perspective from the marketing point of view.

Data communication within and between computers systems is handled by system software. Communications software transfers data from one computer system to another. These programs usually provide users with data security and error checking along with physically transferring data between the two computer's memories. During the past five years the developing electronic network communication has stimulated more and more companies to produce various communication software, such as Web-Browsers for Internet.

Работа над содержанием текстов. Выполнение после текстовых упражнений и по закреплению лексического материала по теме.

2.Грамматика. № 3
Модальные глаголы.

1.4. Тема 4: «Написание программы» (16 часов).
1.4.1 Перечень и краткое содержание рассматриваемых вопросов:
1. Программирование. № 4

Чтение: Программирование. Лексика: Лексический минимум по теме «Программирование» (ProgrammingprogrammachinecodeassemblylanguagesassemblerHigh-levellanguagescompilerJavaappletsmarkuplanguagesHTMLVoiceXML).
Говорение: обучение монологической и диалогической речи по теме " Программирование". Формирование и развитие навыков письменной речи.Написаниеаннотациипотеме «Программирование». Чтениеипереводтекста:

Programming

Programming is the process of writing a **program** using a computer language. A program is a set of instructions which a computer uses to do a specific task (e.g. a solution to a Maths problem).

The only language a PC can directly execute is **machine code**, which consists of 1s and 0s. This language is difficult to write, so we use symbolic languages that are easier to understand. For example, **assembly languages** use abbreviations such as ADD, SUB, MPY to represent instructions. The program is then translated into machine code by software called an **assembler**.

Machine code and assembly languages are called low-level languages because they are closer to the hardware.

High-level languages, however, are closer to human languages; they use forms resembling English, which makes programming easier. The program is translated into machine code by software called a compiler. Some examples are:

● FORTRAN - used for scientific and mathematical applications

● COBOL - popular for business applications

● BASIC - used as a teaching language; Visual BASIC is now used to create Windows applications

● C - used to write system software, graphics and commercial programs

● Java - designed to run on the Web; **Java applets** are small programs that run automatically on web pages and let you watch animated characters, and play music and games.

The languages used to create Web documents are called **markup languages**; they use instructions (markups) to format and link text files. Examples are:

●**HTML** - the code used to create Web pages

●**Voice XML** - it makes Internet content accessible via speech recognition and phone. Instead of using a web browser on a PC, you use a telephone to access voice-equipped websites. You just dialthe phone number of the website and then give spoken instructions, commands, and get the required information.

Writing a program

To write a program, software developers usually follow these steps.

First they try to understand the problem and define the purpose of the program.

Then they design a logical plan of the program. There are two common techniques for planning the **program logic**.

The first technique is **flowcharting**. **A flowchart** is a plan in the form of a graphic or pictorial representation that uses **predefined symbols** to illustrate the program logic. It is, therefore, a "picture" of the successive logical steps to be performed by the computer. Each of the predefined symbol shapes stands for a general operation. The symbol shape communicates the nature of the general operation, and the specifics are written within the symbol. A plastic or metal guide called **a template** is used to make drawing the symbols easier. The second technique for planning program logic is called **pseudocode**- an imitation of actual program instructions. It allows a program-like structure without the **burden** of programming rules to follow. Pseudocode is less time-**consuming** for the professional programmer than is flowcharting. It also emphasizes **a top-down approach** to program structure.

Pseudocode has three basic structures: sequence, decision, and **looping logic**. With these three structures, any required logic can be expressed.

Next they write the program instructions. This is called coding. The instructions will be written on a form called a coding form. The instructions we write will be recorded in a machine-readable form. The instructions must be written according to a set of rules that are the foundation of a programming language.

When the program is written, they test it: they run the program to see if it works and use special tools to detect bugs, or errors. Any errors are corrected until it runs smoothly. This is called **debugging**, or bug fixing. Debugging is a very important task in the software development process, because an incorrect program can have significant consequences for its users. Some languages are more prone to

some kinds of faults because their specification does not require compilers to perform as much checking as other languages.

There are two kinds of errors or bugs with which programmers must deal.

The first type is the coding error. Such errors are syntax errors that prevent the language processor from successfully translating the source program to object program code. The language processor identifies the nature and the location of the error on the source program listing, so these errors are relatively easy to find and correct.

The second type of bug is the logic error. The computer program can be successfully translated, but the program does not produce the desired results. These errors are generally much more difficult to find and to correct than are coding errors. Logic errors can be avoided through careful planning of the program logic.

Finally, software companies write a detailed description of how the program works, called program documentation. They also have a maintenance program. They get reports from users about any errors found in the program. After it has been improved, it is published as an updated version.

Работа над содержанием текстов. Выполнение после текстовых упражнений и по закреплению лексического материала по теме.

2.Грамматика. № 4
Причастие.

1.5. Тема 5: «Творческое программное обеспечение» (14 часов).
1.5.1 Перечень и краткое содержание рассматриваемых вопросов:
1. Творческое программное обеспечение. № 5
Чтение: Творческое программное обеспечение. Лексика: Лексическийминимумпотеме «Творческоепрограммноеобеспечение» (creativity, creative software, photo editing software, graphics and illustration, software, desktop publishing software, promotional, leaflets, multiple, affordable, tweak an image). Говорение: обучение монологической и диалогической речи по теме "Творческое программное обеспечение ". Формирование и развитие навыков письменной речи.Написание аннотации по теме «Творческоепрограммноеобеспечение». Чтениеипереводтекстов:

Творческоепрограммноеобеспечение

A computer to complete a job requires more than just the actual equipment or hardware we see and touch. It requires Software – programs for directing the operation of a computer or electronic data.Software is the final computer system component.

Computers can input, calculate, compare, and output data as information. Software determines the order in which these operations are performed.
Creativity is a huge part of business, **creative software** covers the following areas:

- **Photo editing software**. Manipulate photos on your computer or mobile device. For instance, you can remove red-eye, crop photos or make them sharper.
- **Graphics and illustration software**. Create visual elements like logos and diagrams from scratch.
- **Desktop publishing software**. Design and print **promotional** materials like posters, brochures and **leaflets**.
- Video software. Edit and combine videos to use on your own website, YouTube or other places. For instance, you can create 'how to' or demonstration videos.
- Audio software. Record and edit audio clips. You can use audio software to record podcasts, create music and more.

For instance, digital recording equipment, cameras and smartphones that offer **multiple** ways to create content are remarkably **affordable** these days. For example, you might use photo editing software **to tweak an image** on your smartphone before posting it to social. Or you might create and share a short video of your new office online.Creative software can also be useful in other situations.

Работа над содержанием текстов. Выполнение после текстовых упражнений и по закреплению лексического материала по теме.

3. Грамматика. № 5
Герундий.

1.6. Тема 6: «Интернет-преступления. Вредоносные программы» (14 часов).
1.6.1 Перечень и краткое содержание рассматриваемых вопросов:
1. Интернет-безопасность. № 6
Чтение: Интернет-безопасность. Лексика: Лексическийминимумпотеме «Интернет-безопасность» (wide variety of opportunities, cracker, black-hat hacker, crime, virus propagation, fraud, intellectual property theft, valuables, phishing, cyberstalking, harassment, abuse, piracy, copyrighted software, malware, scam). Говорение: обучение монологической и диалогической речи по теме " Интернет-безопасность". Формирование и развитие навыков письменной речи.Написаниеаннотациипотеме «Интернет-безопасность».Чтениеипереводтекстов:

Internet crime
The Internet provides a **wide variety of opportunities** for communication and development, but unfortunately it also has its dark side.

Crackers, or **black-hat hackers**, are computer criminals who use technology to perform a variety of **crime**s: **virus propagation, fraud, intellectual property theft**, etc.

Internet-based crimes include **scam**, email **fraud** to obtain money or **valuables,** and **phishing**, bank fraud, to get banking information such as passwords of Internet bank accounts or credit card details. Both crimes use emails or websites that look like those of real organizations.

Due to its anonymity, the Internet also provides the right environment for **cyberstalking**, online **harassment** or **abuse**, mainly in chat rooms or newsgroups.

Piracy, the illegal copying and distribution of **copyrighted software**, information, music and video files, is widespread.

But by far the most common type of crime involves **malware**.

Malware: viruses, worms, trojans and spyware

Malware (malicious software) is software created to damage or **alter** the computer data or its operations. These are the main types.

Viruses are programs that spread by attaching themselves to **executable files** or documents. When the infected program is run, the virus propagates to other files or programs on the computer. Some viruses are designed to work at a particular time or on a specific dare, e.g. on Friday 13th. An email virus spreads by sending a copy of itself to everyone in an email address book.

Worms are self-copying programs that have the capacity to move from one computer to another without human help, by exploiting **security flaws** in computer networks. Worms are self-contained and don't need to be attached to a document or program the way viruses do.

Trojan horses are **malicious** programs disguised as **innocent-looking files** or embedded within **legitimate software**. Once they are activated, they may affect the computer in a variety of ways: some are just annoying, others are more ominous, creating a backdoor to the computer which can be used to collect stored data. They don't copy themselves or reproduce by infecting other files.

Spyware, software designed to collect information from computers for commercial or criminal purposes, is another example of malicious software. It usually comes hidden in fake freeware or **shareware applications** downloadable from the Internet.

Работа над содержанием текстов. Выполнение после текстовых упражнений и по закреплению лексического материала по теме.

2. Грамматика. № 6
Инфинитив.

1.7. Тема 7: «Электронные банковские операции» (12 часов).
1.7.1 Перечень и краткое содержание рассматриваемых вопросов:
1. Электронные банковские операции. № 7

Чтение: Электронные банковские операции. Лексика: Лексическийминимумпотеме «Электронныебанковскиеоперации» (electronicbanking,transaction, brick-and- mortar ban, brick-and-click bank, access, wireless network,authentication, simultaneous, fraud, PIN, password, TAN, log in). Говорение: обучение монологической и диалогической речи по теме «Электронные банковские операции». Написаниеаннотациипотеме «Электронныебанковскиеоперации». Чтениеипереводтекстов:

Электронныебанковскиеоперации

Electronic banking is the general term given to the possibility of performing banking **transaction**s through electronic communications, mainly the Internet. That's why many people prefer to use the terms online banking or Internet banking.

Online services can be provided by traditional banks, **brick-and- mortar banks**, which through the use of these new technologies become **brick-and-click banks**. Banks that don't have physical branches or ATMs are called virtual or Internet banks.

To use these services you need a computer with Internet **access**. Computers can also log in with a mobile phone or a PDA. The use of **wireless networks** to access financial instructions is known as wireless banking.

Most online banks have introduced the concept of two-factor **authentication**. The **simultaneous** use of at least two different devices or layers of security prevents **fraud**.

When you open an Internet account, you are given a confidential **PIN**, personal identification number, and a **password** and username.

For some transactions, customers are required to use a **TAN**, transaction authorization number, from a list provided by the. It can only be used once, and it acts as a second password.

Работа над содержанием текстов. Выполнение после текстовых упражнений и по закреплению лексического материала по теме.

2. Грамматика. № 7
Условные предложения.

1.8. Тема 8: «Компьютерная эргономика» (14 часов).
1.8.1 Перечень и краткое содержание рассматриваемых вопросов:
1 Охрана труда и техника безопасности. № 8

Чтение: Охрана труда и техника безопасности. Лексика: Лексическийминимумпотеме «Охранатрудаитехникабезопасности» (ergonomics, repetitive strain injury, eye strain, fatigue, emit, adjustable chair, rest firmly, enough leg room, at eye level, arms' length from the monitor, document holder, awkward, elbows, wrists straight, flat). Говорение: обучение монологической и диалогической речи по теме «Охрана труда и техника

безопасности». Написаниеаннотациипотеме «Охрана труда и техника безопасности». Чтениеипереводтекстов:

Охранатрудаитехникабезопасности

Ergonomics (or human factors) is the scientific discipline concerned with the understanding of the interactions among humans and other elements of a system, and the profession that applies theoretical principles, data and methods to design in order to optimize human well being and overall system.

There are a number of health and safety problems that may result from continuous use of computers:

· Typing constantly at high speed may provoke **repetitive strain injury** or RSI, which causes pain in the neck, arms, wrists, hands and fingers.

· Bad work postures and sitting in uncomfortable chairs may cause backache and stress.

· Looking at the screen for long periods of time, and lights reflecting off the screen, can cause headaches and **eye strain**, pain and **fatigue** of the eyes.

· Cathode Ray Tube monitors can **emit** electromagnetic radiation which can be dangerous to health.

The study of how people interact safely and efficiently with machines and their work conditions is called ergonomics, in computing, ergonomics is about designing computer facilities so they are safe and comfortable. Here are a few tips.

1. Get an **adjustable chair** so you can change its height and angle.

2. Make sure your feet **rest firmly** on the ground or on a foot rest.

3. Ensure you have **enough leg room** under the desk.

4. Put the monitor **at eye level** or just below.

5. Sit at **arms' length from the monitor** (40-80 cm). Don't sit near the sides or back of CRT monitors; or use LCD screens, which are free from radiation.

6. Use a **document holder**, in line with the screen, to reduce **awkward** neck and eye movements between the document and the screen.

7. Position the keyboard at the same height as your **elbow**s, with your arms parallel to the work surface. Try to keep your **straight** and **flat** when typing.

8. Take regular breaks from the computer and look away from the screen at regular intervals.

Работа над содержанием текстов. Выполнение после текстовых упражнений и по закреплению лексического материала по теме.

2. Грамматика. № 8
Сложное дополнение.

1.9. Тема 9: «Будущие тенденции в области технологий»(16 часов).
1.9.1 Перечень и краткое содержание рассматриваемых вопросов:
1.Тенденции будущего. Роботы и андроиды. № 9
Чтение: Тенденции будущего. Роботы и андроиды. Лексика: Лексическийминимумпотеме «Тенденции будущего. Роботыиандроиды»

(trend, possibility, satellite, congestion, surgeon, destination, distant , collision branch, wearable, searchrobots, outer space, advanced knowledge, movable structure, power source, sensory system). Говорение: обучение монологической и диалогической речи по теме «Тенденции будущего. Роботыиандроиды». Написаниеаннотациипотеме «Тенденции будущего. Роботыиандроиды». Чтениеипереводтекстов:

Тенденциибудущего

It is very hard to predict future **trends** in technology with any certainty. Here are some **possibilities**:

It is likely that intelligent machines such as robots will be used much more than they are at present. One **possible** area is surgery where computer-controlled robot arms can, in some cases, operate with more **precision** and less chance of error than a human **surgeon**. Intelligent machines can also be used in telemedicine to help doctors diagnose and treat patients at a distance, even in differentcountries.

In transport, features such as satellite navigation already exist now in many cars, and may become standard in all cars. **Satellites will** probably **be used** to provide information on road **congestion**, so drivers will be able to choose the quickest route to their **destination**. In the **distant** future, road vehicles may come under computer **control** on main roads to ensure safe speeds are maintained and there is no danger of **collision** with other vehicles.

In all **branches** of technology computers will play a greater role. They will be faster and more powerful than today's, and they will be everywhere including the clothes we wear. **Wearable** computers will give us directions, act as phones, and **search** the Internet for informationwe want. The keyboard will disappear. Everything will be voice-operated. In our homes, we might also have voice-operated domestic appliances. We will tell the oven how we like our pizza and it will remember the next time we ask it to bake one.

Роботыиандроиды

Robots are found in the workplace, the home, **outer space**, and even the battlefield. Engineers working on the design of robots must have **advanced knowledge** of Mechanical, Electrical, and Electronic engineering. All robots have five basic components: a **movable structure**, a motor, a **power source**, a **sensory system** and a processor. The entire robot may **move** on legs, on wheels, on **caterpillar tracks**, or only one part may move, such as the arm of an industrial**robot**.

Robots are often used for **routine task**s but they can now **perform tasks** impossible for humans. The snake- arm robot is used for assembly and inspection **tasks** and can penetrate **difficult-to-reach** places. It can perform those tasks without continuous human guidance.

ASIMO is **a humanoid robot**, which is capable of intelligent behavior. It can recognize objects and gestures, calculate distances. ASIMO has advanced engineering and control systems to allow it to walk naturally.

The Mars Rover must navigate over complex terrains, thinking several steps ahead. It is a mobile robot, which can move over the surface of Mars.

There are many robotics competitions that challenge entrants **to device** a robot **to overcome** a variety of problems. Some of these are purely for entertainment such as the Robot Wars that was shown

Работа над содержанием текстов. Выполнение после текстовых упражнений и по закреплению лексического материала по теме.

2. Грамматика. № 9
Сложное подлежащее.