ІНТЕГРАЛЬНИЙ УНІВЕРСИТЕТ ХАРЧОВИХ ТЕХНОЛОГІЙ

ЗАТВЕРДЖУЮ

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«___» __________________20__р.

ІНОЗЕМНА МОВА

(АНГЛІЙСЬКА МОВА)

МЕТОДИЧНІ ВКАЗІВКИ
до практичних занять та самостійної роботи з текстами
фахового спрямування для студентів 1 курсу напряму 6.050101
“Комп’ютерні науки”
денної та заочної форми навчання

Реєстраційний номер електронних методичних
вказівок у НМУ ____________

СХВАЛЕНО
на засіданні кафедри ділової іноземної мови та
міжнародної комунікації
Протокол № 9
від 22 квітня 2012 р.

Київ НУХТ 2012

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Відповідальний за випуск Г.А.Чередніченко завідувач кафедри, канд. пед.наук
Вступ до методичних рекомендацій

Методичні рекомендації до практичних занять призначені для навчання студентів напряму підготовки “Комп'ютерні науки” читанню текстів з фаху на англійській мові та розумінню їх для вилучення необхідної інформації та проведення бесіди зі спеціальністю студента.


Дані методичні вказівки сприятимуть формуванню у студентів загальних та професійно-орієнтованих комунікативних мовленнєвих компетенцій та є додатковим спонукальним мотивом до удосконалення навичок усного та писемного мовлення в професійній сфері.

Unit 1

A Man and Computers

I. Vocabulary.
Exercise 1. *Remember the following words and word-combinations:*

1. character
2. data
3. hardware
4. software
5. instructions
6. processing
7. to accept
8. to compare
9. to activate
10. to boot
11.to store
12.to install
13.to retrieve
14.raw
15.decision making
16. to convert
17.to refine
18.transmission
19.intelligence
20.procedures
21.keyboard
22.access

Exercise 2. *Guess the meaning of the following international words.*

Computer, diskette, processor, scanner, information, microphone, printer, modem, Internet, interface.
Exercise 3. Define the part of speech of the words below paying attention to their suffixes. Translate them.

Acception, processing, logical, digital, electronic, electromechanical, combination, mathematical, useful, commercial, competing, informational.

Exercise 4. Translate the following word-combinations:

The term is used to …
in other words …
total computer system …
the computer software instructions …
processing informations …
instruction called a program …
characters called data …
raw materials …
computer is used to …
mathematical and logical operations …

II. Reading.

Exercise 5. Read and translate the text.

What is a Computer?

The term computer is used to describe a device made up of a combination of electronic and electromechanical (part electronic and part mechanical) components. Computer has no intelligence by itself and is referred to as hardware. A computer system is a combination of five elements:

- Hardware;
- Software;
- People;
• Procedures;
• Data/information.

When one computer system is set up to communicate with another computer system, connectivity becomes the sixth system element. In other words, the manner in which the various individual systems are connected – for example, by phone lines, microwave transmission, or satellite – is an element of the total computer system.

Software is the term used to describe the instructions that tell the hardware how to perform a task. Without software instructions, the hardware does not know what to do. People, however, are the most important component of the computer system: they create the computer software instructions and respond to the procedures that those instructions present.

The basic job of computer is processing information. Computers accept information in the form of instruction called a programme and characters called data to perform mathematical and logical operations, and then give the results. The data is raw material while information is organized, processed, refined and useful for decision making. Computer is used to convert data into information.

II. Language.

Exercise 6. Match words and word-combinations in column A with those in column B.

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>to accept</td>
<td>дані</td>
</tr>
<tr>
<td>character</td>
<td>обробка інформації</td>
</tr>
<tr>
<td>data</td>
<td>операції</td>
</tr>
<tr>
<td>instruction</td>
<td>приймати</td>
</tr>
<tr>
<td>processing</td>
<td>завантажувати</td>
</tr>
<tr>
<td>to boot</td>
<td>знак, літера …</td>
</tr>
<tr>
<td>to compare</td>
<td>розум</td>
</tr>
<tr>
<td>intelligence</td>
<td>перетворювати</td>
</tr>
</tbody>
</table>
Exercise 7. Give the English equivalents to the Ukrainian words and word-combinations in the following sentences:

1. Computer не має розуму by itself.
2. A computer system consists of обладнання, програмне забезпечення, операциї, дані та people.
3. The manner in which the various окремі системи are connected is an element of the спільної комп’ютерної системи.
4. Software describes the команди that tell the обладнання how to perform a task.
5. People create команди комп’ютерних програм.
6. The main task of computer is обробка інформації.
7. Information is accepted in the form of instruction called a програма and символів called дані.
8. The data is необроблений матеріал.
9. Information is useful for прийняття рішень.
10. People use computer to перетворювати data into information.

Exercise 8. Complete the sentences using information from the text:

1. The term computer is used to …
2. A computer system is a …
3. Connectivity appears when …
4. Software in the term used to …
5. People are the most …
6. Processing information is the basic job of …
7. Computers accept information to …
8. The data is …
9. Computer is used to …

**Exercise 9.** *Ask all possible questions to the following sentences:*

1. There are 5 elements of computer system: hardware, software, people, data, procedures.
2. People are the most important component of the computer system.
3. The basic job of a computer is processing information.

**III. Oral Practice.**

**Exercise 10.** *Answer the questions:*

1. What does the term computer “describe”?
2. Is computer intelligent?
3. What are 5 elements of a computer system?
4. What is connectivity?
5. What is software?
6. What is the difference between hardware and software?
7. Why are people the most important component of a computer system?
8. In what way do terms “data” and “information” differ?
9. How does the computer convert data into information?

**Exercise 11.** *Using information from text A speak on:*

1. Computer as a universal counting device.
2. 5 elements of a computer system:
   - hardware;
   - software;
3. Connectivity.

**Exercise 12.** Make up a dialogue on the situation.

Your younger brother/sister asks you about computer. He/she wants to know the principles of operation,
- what is keyboard, printer;
- if computer has intelligence;
- why it is so clever;
- if it is possible to make a computer by himself/herself.

**IV. Reading and comprehension.**

**Exercise 13.** Read the text “Internet” without a dictionary and render it in Ukrainian/Russian (8-10 minutes).

**Exercise 14.** Reread the text B and find the English equivalents to the following word-combinations:

- … по всім темам;
- ... засоби інформаційного обміну;
- ... комерційні операції;
- ... через місцевих провайдерів;
- ... все доступне;
- ... люди, приєднані до Інтернету;
- ... змагаючись з партнерами з інших країн;
- ... цифровий формат;
- ... росте надзвичайно швидко;
- ... великий спектр питань;
Internet

Millions of people around the world use the Internet to search for and retrieve information on all sorts of topics in a wide variety of areas including the arts, business, government, humanities, news, politics and recreation. People communicate through electronic mail (e-mail), discussion groups, chat channels and other means of informational exchange. They share information and make commercial and business transactions. All this activity is possible because tens of thousands of networks are connected to the Internet and exchange information in the same basic ways.

The World Wide Web (WWW) is a part of the Internet. But it’s not a collection of networks. Rather, it is information that is connected or linked together with a web. You access this information through one interface or tool called a Web browser. The number of resources and services that are part of the World Wide Web is growing extremely fast. In 1996 there were more than 20 million users of the WWW, and more than half the information that is transferred across the Internet is accessed through the WWW. By using a computer terminal (hardware) connected to a network that is a part of the Internet, and by using a program (software) to browse or retrieve information that is a part of the World Wide Web, the people connected to the Internet and World Wide Web through the local providers have access to a variety of information. Each browser provides a graphical interface. You move from place to place, from site to site on the Web by using a mouse to click on a portion of text, icon or region of a map. These items are called hyperlinks or links. Each link you select represents a document, an image, a video clip or an audio file somewhere on the Internet. The user doesn’t need to know where it is, the browser follows the link.

All sorts of things are available on the WWW. One can use Internet for recreational purposes. Many TV and radio stations broadcast live on the WWW. Essentially, if something can be put into digital format and stored in a computer, then it’s available on the WWW. You can even visit museums, gardens and cities throughout the world, learn foreign languages and meet new friends. And, of course,
you can play computer games through WWW, competing with partners from other countries and continents.

Just a little bit of exploring the World Wide Web will show you what a lot of use and fun it is.

**Notes:**

World Wide Web – “Всесвітне Павутиння”
variety – різноманітність, спектр
humanities – гуманітарні науки
business transactions – комерційні операції
access – доступ
to browse – роздивлятися, розглядати
browser – браузер (програм пошуку інформації)
network – сітка
to share – ділити
recreation – розвага
to provide – забезпечувати (що-небудь)
broadcast live – передавати в прямому ефірі
to link – з’єднувати
hyperlink – гиперпосилання
to compete – змагатися

**Exercise 15. Answer the questions:**

1. What is the Internet used for?
2. Why are so many activities such as e-mail and business transactions possible through the Internet?
3. What is the World Wide Web?
4. What is Web browser?
5. What does a user need to have an access to the WWW?
6. What is a hyperlink?
7. What resources are available on the WWW?
8. What are the basic recreational applications of the WWW?

**Exercise 16. Which of the listed below statements are true/false?**

1. There are still not so many users of the Internet.
2. There is information on all sorts of topics on the Internet, including education and weather forecast.
3. People can communicate through e-mail and chat programs only.
4. The Internet is tens of thousand of networks, which exchange the information in the same basic way.
5. You can access information available on the WWW through the Web browser.
6. You need a computer and a special program to be a WWW user.
7. You move from site to site by clicking on a portion of text only.
8. Every time the user wants to move somewhere on the web he/she needs to step by step enter links and addresses.
9. Films and pictures are not available on the Internet.
10. Radio and TV-broadcasting is a future of the Internet. They are not available yet.

**Exercise 17. Find the definitions to the following words and word-combinations in the text:**

1. Internet
2. World Wide Web
3. Web browser
4. Internet provider
5. Hyperlinks

**Exercise 18. Complete the following sentences with words and word-combinations given below in the box:**
1. You access the information through one interface or tool called a …
2. People connected to the WWW through the local …
3. The user doesn’t need to know where the site is, the … follows the …
4. In 1996 there were more than 20 million users of the …
5. Each … provides a graphical interface…
6. Local … Charge money for their services to access Words to match with.

   - web browser;
   - providers;
   - link;
   - WWW.

V. Oral practice.

Exercise 19. Discussion points:

1. Some people think that Internet is very harmful, especially for young people, because it carries a lot of information about sex, drugs, violence and terrorism. Do you think that some kind of censorship (цензура) is necessary on the WWW?
2. Has anyone in your group experience working on the Internet? Ask them about:
   1) the difficulties they had;
   2) useful information retrieved;
   3) fun they got.
3. Why do so many people have experience working on the Internet?

VI. Reading.

Exercise 20. Translate the text with a dictionary in writing.

Computers: Software and Hardware
Because of extraordinary technological development during the past decades, the term *computer* is becoming a household word. Computer applications have expanded to such breadth that the computer is now an integral part of virtually every type of business and industrial enterprise.

The number of electronic computers used in any given field of human activity is sometimes believed to indicate the degree of its modernity. For example, the more computers scientific institute uses the more modern it is believed to be. It is not always born in mind, however, that computers alone represent what is called the hardware, i.e. the machinery together with its subtle technical and logical design. In order that the hardware may be used effectively, another essential factor is needed: the so-called software or applied thoughts. The preparation of computer programs, the working out of the logical aspects of material to be manipulated in a computer, takes up as much, if not more, time as the actual production of the hardware and is by no mean easier. The software, as most intangible product, is not always capable of being readily evaluated. This, however, does not change the fact that it is at least as decisive as the hardware in obtaining solutions to concrete scientific and technological problems.

There are two basic types of electronic computers: digital and analogue. Each type has its uses in various fields. However, they have one thing in common: for their effective operation they require ingeniously thought-out software.

**VII. Supplementary reading.**

**Today’s Astonishing Computers**

Not long ago computers were not very reliable and comparatively slow in operation. Since then, several generations of complex electronic computing equipment have been developed, each being significantly better than the one before it. Almost every day a new use is found for these astonishing devices to help man.

We know a computer to be a complex electronic device that can store and process vast quantities of information. Following instructions, computing equipment
will perform calculations such as addition, subtraction, multiplication and division, and provide the answers to a large variety of problems in a tiny fraction of time.

A computer is known to be the “heart” of an electronic data processing system, other parts of equipment being auxiliary.

There are two main types of computing equipment – digital and analogue. They work differently and yield different results. The digital computer is performing a much broader range of functions than the analogue one.

The analogue computer, as its name implies, produces analogues or parallels of the process to be described or the problem to be solved. Both the digital and the analogue computers must be “programmed”. This means they must be set up in such a way that they can produce a result from the information fed into them, and the information itself must be organized so it can be handled by the machines. These devices working by electronic impulses perform at fantastic speed and with great precision.