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Methodological guidelines
for independent work and
practical classes
on the subject

"FUNDAMENTALS OF APPLIED LINGUISTICS"

(for 4th-year full-time students of the first
(bachelor's) level of higher education
specialty 035 – Philology)

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Methodological Guidelines for independent work and practical classes on the Subject **“**Fundamentals of applied linguistics” (for 4th-year full-time students of the first (bachelor's) level of higher education specialty 035 – Philology) / O. M. Beketov National University of Urban Economy in Kharkiv; com.: S. M. Nikiforova. – Kharkiv : O. M. Beketov NUUE, 2021. – 49 p.

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Methodical recommendations are made in accordance with the requirements of the work program on the subject "Fundamentals of Applied Linguistics" and aims to help students of philology to prepare for practical classes in this discipline and organize independent work to study its basics. Made for students, masters, graduate students of the Free Economic Zone, who master the technology of written translation using information technology.

CONTENTS

INTRODUCTION

The rapid growth of information in all spheres of human activity implies the need to form in future professionals new skills, abilities and qualities to meet their professional information needs and the use of information technology in professional activities. To ensure translation activities at a high professional level, future professionals must have modern information technologies, the emphasis of which is shifted to the plane of collective work on the implementation of complex translation tasks. The discipline "Fundamentals of Applied Linguistics" is an integral part of computer training of students. **The subject** of the course is the use and implementation of machine translation systems in the translation of words and texts using electronic dictionaries, which provides an opportunity to train professionals to solve a number of relevant problems in areas involving description and modeling of different types of texts, dictionaries and terminological databases, the use of automatic information retrieval and document layout. **The aim** of the discipline is to form a system of knowledge about a new scientific field - applied linguistics, which studies the relationship of computer systems with linguistics, as well as the formation of skills necessary for effective use of modern information technology in future careers. **The main task** is to provide basic knowledge of the basics of computer science and general linguistics, the concept of automated text processing technology and the main functionality of the most common electronic dictionaries and machine translation systems.

As a result of studying the discipline, students should **know:**

- system of concepts of information theory;
- search on the Internet;
- concepts and types of information technologies;
- principles of text translation using computer programs;
- the ability to create sites on the Internet.

Also, after studying it, they **should be able to**:

- use the Internet as a global database and source of information;

- use the resources of the Internet in future professional activities;
- use electronic dictionaries;
- translate texts using machine translation systems;
- use translation memory programs.

Methodical recommendations are made in accordance with the work program of the discipline “Fundamentals of Applied Linguistics”.

1 GENERAL RECOMMENDATIONS FOR THE STUDY OF THE DISCIPLINE

The purpose of the course: the formation of a system of knowledge about a new scientific field - applied linguistics, which studies the relationship of computer systems with linguistics, as well as the formation of skills necessary for effective use of modern information technology in their future careers.

The task is to provide basic knowledge of the basics of computer science and general linguistics, the concept of technology for automated processing of textual information and the main functionality of the most common electronic dictionaries and machine translation systems.

Subject is the use and implementation of machine translation systems in the translation of words and texts using electronic dictionaries.

Curriculum of the discipline

Module 1 Fundamentals of applied linguistics

Content module 1 Basic concepts of applied linguistics. Subject, object and tasks of applied linguistics

Topic 1 Applied linguistics as a branch of linguistics. History of development and prospects of development of applied linguistics. Basic concepts of applied linguistics.

Topic 2 Subject, object and tasks of applied linguistics. Methods of applied linguistics**.**

Topic 3 The main directions of applied linguistics. Hypertext technology and its use in information systems.

Topic 4 Computational linguistics as an applied linguistic discipline. Information retrieval aspects of applied linguistics.

Content module 2 Electronic and online dictionaries. Work with programs

Topic 5 Lexicography as a science of compiling dictionaries. Typology of dictionaries. Structural parts of the dictionary. The main components (zones) of the dictionary article.

Topic 6 Electronic dictionaries in modern linguistics. Online dictionaries, glossaries, encyclopedias and reference books.

Topic 7 Working with programs. Internet Explorer features. Internet Explorer window. Navigation on the pages of the Web-site.

Content module 3 Internet-technologies in translation activity and their possibilities. Machine translation systems

Topic 8 The social significance of network communications. PC local area networks. What is client-server technology. Development, regulation and access to the Internet.

Topic 9 The use of information resources of the global Internet in the work of the translator. Search engines. Theory and practice of information retrieval systems. Features of linguistic search on the Internet. Sites for translators and linguists.

Topic 10 The concept of machine translation. Machine translation systems. Varieties of machine translation.

The structure of the discipline and the distribution of time

Content modules	Number of hours				
	total	lec.	pract.	lab.	ind. work
MODULE (semester)					
Content module 1.	35		24		11
Content module 2.	35		18		17
Content module 3.	35		18		17
Final control	15				15
Total hours	**120**		**60**		**60**

Methods of control and the procedure for evaluating learning outcomes

To control the quality of the acquired knowledge are provided:

- current control (tests, testing (machine or computer), oral interview, interview);

- credit is obtained by summing the points of current control and points obtained during the test.

Evaluation of the success of the course in the form of a distribution of the number of points obtained is carried out in accordance with the unified assessment scale (national and ECTS).

The structure of the discipline and the distribution of points

Content modules and topics (numbers)	Maximum number of points			
	Total	including		
		pract.	lab	ind.work
1	2	3	4	5
MODULE (semester)	**100**			
Content module 1	20	8	-	12
Content module 2	20	8	-	12
Content module 3	30	14	-	16
Final control	30	-	-	30

Rating scale

The sum of points for all types of educational activities	Score on a national scale	
	for the exam, diff. offset	for offset
90 - 100	excellent	credited
82 - 89	good	
74 - 81		
64 - 73	satisfactory	
60 - 63		
35 - 59	unsatisfactory with the possibility of reassembly	not credited with the possibility of re-assembly
0 - 34	unsatisfactory with mandatory re-study of the discipline	not credited with mandatory re-study of the discipline

2 CONTENT OF PRACTICAL CLASSES

Content module 1 Basic concepts of applied linguistics.

Subject, object and tasks of applied linguistics

Topic 1 Applied linguistics as a branch of linguistics. History of development and prospects of development of applied linguistics. Basic concepts of applied linguistics

1. Definitions of the term “applied linguistics”.
2. Major branches of applied linguistics.
3. History of development and prospects of development of applied linguistics.
4. The main areas of applied linguistics.
5. The problems of applied linguistics.

Today there are several definitions of “applied linguistics”.

Applied linguistics is a field of linguistics that deals with linguistic constructions and solves specific problems of language processing and its use.

Applied linguistics are methods of studying language material that show important aspects of language, its analysis, synthesis, construction of a new linguistic object, model of language generation, language influence, global connections and interactions and language with thinking, ie artificial intelligence (languge data processing.)

Applied linguistics is a description of a problem area to solve a specific problem.

Applied linguistics is an activity of using scientific knowledge about the structure and functioning of language in non-linguistic scientific disciplines and in various spheres of practical human activity, as well as a theoretical understanding of such activities. From a functional point of view, applied linguistics is a scientific discipline in which means of optimizing the functioning of language are studied and developed.

Applied linguistics is a complex discipline that is related to psychology, philosophy, physiology, mathematics, logic, sociology, computer science, programming, and others.

Applied linguistics is an interdisciplinary field which identifies, investigates, and offers solutions to language-related real-life problems. Some of the academic fields related to applied linguistics are education, psychology, communication research, anthropology, and sociology.

Major branches of applied linguistics include bilingualism and multilingualism, conversation analysis, contrastive linguistics, sign linguistics, language assessment, literacies, discourse analysis, language pedagogy, second language acquisition, language planning and policy, interlinguistics, stylistics, language teacher education, pragmatics, forensic linguistics and translation.

History

The tradition of applied linguistics established itself in part as a response to the narrowing of focus in linguistics with the advent in the late 1950s of generative linguistics, and has always maintained a socially-accountable role, demonstrated by its central interest in language problems.

Although the field of applied linguistics started from Europe and the United States, the field rapidly flourished in the international context.

Applied linguistics first concerned itself with principles and practices on the basis of linguistics. In the early days, applied linguistics was thought as "linguistics-applied" at least from the outside of the field. In the 1960s, however, applied linguistics was expanded to include language assessment, language policy, and second language acquisition. As early as the 1970s, applied linguistics became a problem-driven field rather than theoretical linguistics, including the solution of language-related problems in the real world. By the 1990s, applied linguistics had broadened including critical studies and multilingualism. Research in applied linguistics was shifted to the theoretical and empirical investigation of real world problems in which language is a central issue.

In the United States, applied linguistics also began narrowly as the application of insights from structural linguistics - first to the teaching of English in schools and subsequently to second and foreign language teaching. The linguistics applied approach to language teaching was promulgated most strenuously by Leonard Bloomfield, who developed the foundation for the Army Specialized Training Program, and by Charles C. Fries, who established the English Language Institute (ELI) at the University of Michigan in 1941. In 1946, Applied linguistics became a recognized field of studies in the aforementioned university. In 1948, the Research Club at Michigan established Language Learning: A Journal of Applied Linguistics, the first journal to bear the term applied linguistics. In the late 1960s, applied linguistics began to establish its own identity as an interdisciplinary field of linguistics concerned with real-world language issues. The new identity was solidified by the creation of the American Association for Applied Linguistics in 1977.

Components and Directions

The main areas of applied linguistics related to language learning:

- lexicography – theory and practice of compiling dictionaries;
- linguodidactics – the science of developing methods of teaching a foreign language;
- assimilation of a second language is the science of the process of language acquisition (in contrast to linguodidactics – from the point of view of the student);
- terminology – the science of streamlining and standardizing scientific and technical terminology;
- translation studies – translation theory.

Traditional problems of applied linguistics include compiling dictionaries, development of alphabets and writing systems, transcription of oral speech and transliteration of foreign words, linguistic substantiation of teaching native and foreign languages, translation from one language to another, standardization and unification of scientific and technical terminology, creation of artificial languages, improvement of spelling and punctuation, language culture, etc.

New problems of applied linguistics include automatic (machine) translation, creation of information languages, automatic annotation and indexing of documents,

linguistic support of information systems, automatic processing of text information, linguistic support of automatic control systems (ACS), automatic analysis (recognition) and automatic synthesis, text, etc. Applied linguistics is closely related to mathematics, cybernetics and computer science.

In general, modern applied linguistics is quite diverse and is probably related to almost all areas of human practice. Internet, a new information environment that combines concepts such as “computer technology”, “communication”, “society”, hypertext (shell development, ergonomic interface organization), computer text design, monitoring of various discourses (political, advertising, technical) with the involvement of a huge amount of textual material - these are the technological realities of today, which are inextricably linked with the theoretical problems of text linguistics, discourse.

Topic 2 Subject, object and tasks of applied linguistics. Methods of applied linguistics

1. Subject of applied linguistics.
2. Object of applied linguistics.
3. Tasks of applied linguistics.
4. Methods of applied linguistics.

Applied linguistics is a branch of linguistics in which language processing technologies (traditional, ie non-automated, and automated) are developed for various branches of social life.

Areas of use of these technologies are:

- fixation and storage of speech information;
- information transfer;
- linguistic processing of texts;
- use of language as a means of mass communication.

The object of language study in theoretical linguistics is language as a sign communication system. The object of language study in applied linguistics is the ways of practical use of language.

The purpose of studying language in theoretical linguistics is to analyze language as a complex sign system. The purpose of language study in applied linguistics is to solve a wide range of practical problems based on the optimization of communicative, epistimistic, cognitive functions of language (Baranov AM).

The range of **tasks** of applied linguistics is a description (model) of the problem area to solve this particular problem, the study and development of tools for optimizing language functions; the applied description focuses on specific subtext, not on the language as a whole: as a rule, they need to be formalized.

Main tasks of applied linguistics (AL):

1. Translation from / into a foreign language.
2. Teaching a foreign language (teaching methods), language didactics.
3. Communication by technical means.
4. Creation of artificial languages.
5. Information search.
6. Annotation and abstracting of texts.
7. Compilation of dictionaries (practical lexicography).
8. Ordering, standardization, unification of scientific and technical terminology.
9. Organization of bibliographic information.
10. Effective typographic set.
11. Transcription of oral speech.
12. Name the new.

With the development of new information technologies, the AL is developing in direction of **automation of the main tasks**, namely**:**

1. Machine translation + machine dictionaries.
2. Computer language didactics.

3. Computer L (all L applications in computer environments.
4. Mathematical L (development of formal language models).
5. Automatic processing of natural languages:
   - speech recognition and synthesis;
   - automation of information works;
   - automatic information retrieval systems.
6. Quantitative L (frequency analysis of texts).

Topic 3 The main directions of applied linguistics. Hypertext technology and its use in information systems

1. The main directions of Applied Linguistics.
2. Hypertext technologies of text presentation.
3. The differences between text and hypertext.
4. Simple and complex hypertext.

The main directions of Applied Linguistics, associated with practical applications:

1. Computational Linguistics
2. Machine translate
3. Automatic character recognition
4. Automatic Speech Recognition
5. Automatic extraction of the data
6. Information search
7. Extracting information
8. Automatic summarization of texts
9. Building knowledge management systems
10. Creation of electronic dictionaries, thesauri, ontologies
11. Corpus linguistics, creation and use of electronic text corpora
12. Linguistic expertise (for example, in judicial practice)
13. The science of ordering and standardizing scientific and technical terminology

Hypertext technologies of text presentation. The phenomenon of hypertext is possiblediscuss from several points of view. On the one hand, this is a special way representation, organization of the text, on the other - a new kind of text, opposed by many of its properties of the ordinary text formed in Gutenberg tradition of printing. And finally, it's a new way, a tool and new text comprehension technology.

Hypertext technologies make it easy to combine different types of information - plain text, drawing, graph, table, diagram, sound and moving image. Both traditional text and hypertext are phenomena generated by new technologies. In the first case, technology allowed easy to replicate and disseminate knowledge of various types, and in the second - computer technology has made it possible to change the very appearance of text and its structure. Hypertext diversity is the first technological property of hypertext, technological in the sense that it follows directly from used computer technology. The second technological property of hypertext is its nonlinearity.

Hypertext does not have a standard, regular reading sequence. Other properties of hypertext to some extent are consequences of these two technological properties.

The **differences** between text and hypertext can be summarized as follows:

- ending, completeness of the traditional text vs. infinity,
- incompleteness, openness of hypertext;
- linearity of text vs. nonlinearity of hypertext;
- exact authorship of the text vs. lack of authorship (in the traditional understanding) in hypertext;
- removing the opposition between the author and the reader;
- subjectivity, one-sidedness of plain text vs. objectivity, versatility of hypertext;
- homogeneity of plain text vs. heterogeneity of hypertext.

There are **simple** and **complex** hypertext. An example of simple hypertext software can serve the electronic content of the document, allowing you to go to any parts of the content, bypassing the stage of viewing the entire text. To simple hypertext includes a system that allows you to view links to literature contained in the text without referring directly to the list literature. Complex hypertexts have a

rich system of transitions between components of hypertext, they have no idea of the basic text with which related minor texts. In a sense, normal, ordinary hypertext and is a complex hypertext.

Topic 4 Computational linguistics as an applied linguistic discipline. Information retrieval aspects of applied linguistics

1. Computational linguistics as an applied linguistic discipline.
2. Information retrieval, its object and tasks.
3. An information search and the search engine.

Computational linguistics as an applied linguistic discipline. Under the term "computational linguistics" is usually used means a wide range of computer tools - programs, computer technology organization and data processing - for modeling the functioning of language in certain conditions, situations, problem areas, as well as the scope of computer language models not only in linguistics, but also in related disciplines. Actually, only in in the latter case we are talking about applied linguistics in the strict sense, because computer modeling of language can be considered as a field application of computer science theory in the field of linguistics. However, the general practice is that the field of computational linguistics covers almost everything related to the use of computers in linguistics.

Information retrieval is the science of search unstructured documentary information. This is especially true for searching for information in documents, searching for documents themselves, retrieving metadata from documents, searching for text, images, video and sound in local relational databases, in hypertext databases such as the Internet and local intranets. Information retrieval is a large interdisciplinary field of science that stands at the intersection of cognitive psychology, computer science, information design, linguistics, semiotics, librarianship, and statistics.

The **object** of information retrieval is textual information, images, audio, video information.

Problems close with information retrieval:

- information routing;
- information filtering;
- information categorization;
- information extraction.

For information search develop:

- information retrieval algorithms;
- information retrieval approaches;
- information retrieval strategies.

To implement it create:

- information retrieval utilities;
- information retrieval systems;
- computer search engines.

The problems of information retrieval include:

- presentation of data, information, knowledge (data, information, knowledge);
- representation of information in modern information repositories (representation of information);
- multilingual information retrieval;
- parallel information retrieval;
- distributed information retrieval;
- social information retrieval

The direction of information retrieval refers to the problems:

- applied (applied) linguistics (applied linguistics);
- natural language processing.

The task of information retrieval is to find relevant (to the search query) information objects or documents among the searchable material.

The task for information retrieval is set in the form of an information query (query), which may contain words, phrases or sentences or a combination thereof. The vast majority of search engines are focused on working with search terms - words or phrases that the search engine recognizes as a whole.

To perform an information search, you need to have a collection of information objects (library, computer files) and a system (algorithm or program) that performs the search. To perform an information search, the user (person or information system) generates an information query (information query). The result of the search is a list of documents that is compiled in accordance with a certain principle. This list is called *ranked list* (ranked results).

The search engine views all available information items (documents) from the collection and selects documents relevant to the information query. Since real search engines do not find all relevant documents, they talk about the accuracy of search engines (system accuracy). The result of the search engine is a list of selected documents (retrieved documents list), among which are relevant documents (relevant documents). For an ideal search engine, the list of selected documents and relevant documents must match. In real search engines in the lists of selected documents are documents that do not match the query. Therefore, they talk about the effectiveness of search engines.

Content module 2 Electronic and online dictionaries. Working with programs.

Topic 5 Lexicography as a science of compiling dictionaries. Typology of dictionaries. Structural parts of the dictionary. The main components (zones) of the dictionary article

1. Lexicography as a science of compiling dictionaries.
2. Typology of dictionaries.
3. Structural parts of the dictionary.
4. The dictionary article sections.

The theory and practice of compiling dictionaries is called **lexicography**. In other words it is the art and craft of writing dictionaries. *General lexicography* focuses on the design, compilation, use and evaluation of general dictionaries, i.e. dictionaries that provide a description of the language in general use. Such a dictionary is usually

called a general dictionary or LGP dictionary. *Specialized lexicography* focuses on the design, compilation, use and evaluation of specialized dictionaries, i.e. dictionaries that are devoted to a (relatively restricted) set of linguistic and factual elements of one or more specialist subject fields, e.g. legal lexicography. Such a dictionary is usually called a specialized dictionary or LSP dictionary.

All dictionaries are divided into *linguistic* and *encyclopedic.*

Encyclopedic dictionaries describe different objects, phenomena and people and give some information about them.

Linguistic dictionaries describe vocabulary units, their semantic structure, their origin and their usage; words are usually given in the alphabetical order.

Linguistic dictionaries are divided into general and specialized dictionaries.

General dictionaries include explanatory (monolingual) and translation (bilingual) dictionaries.

In *explanatory (monolingual) dictionaries* the entry consists of the spelling, transcription, grammatical forms, meanings, examples, phraseology.

Translation (bilingual) dictionaries give words and their equivalents in the other language.

Specialized dictionaries include dictionaries of synonyms, antonyms, collocations, word frequency, slang, neologisms; etymological, pronouncing, phraseological and other dictionaries.

Specialized dictionaries (also technical dictionaries) focus on linguistic and factual matters relating to specific subject fields. A specialized dictionary may have a relatively broad coverage, e.g. a picture dictionary, in that it covers several subject fields such as science and technology (a multi-field dictionary), or their coverage may be more narrow, in that they cover one particular subject field such as law (a single-field dictionary) or even a specific sub-field such as contract law (a sub-field dictionary). Specialized dictionaries may be maximizing dictionaries, i.e. they attempt to achieve comprehensive coverage of the terms in the subject field concerned, or they may be minimizing dictionaries, i.e. they attempt to cover only a limited number of the

specialized vocabulary concerned. Generally, multi-field dictionaries tend to be minimizing, whereas single-field and sub-field dictionaries tend to be maximizing.

Phraseological dictionaries describe idioms, colloquial phrases and proverbs. Some of them have examples from literature.

Etymological dictionaries trace present-day words to the oldest forms of these words and forms of these words in other languages.

Pronouncing dictionaries record only pronunciation.

Dictionaries of neologisms contain newly appearing words.

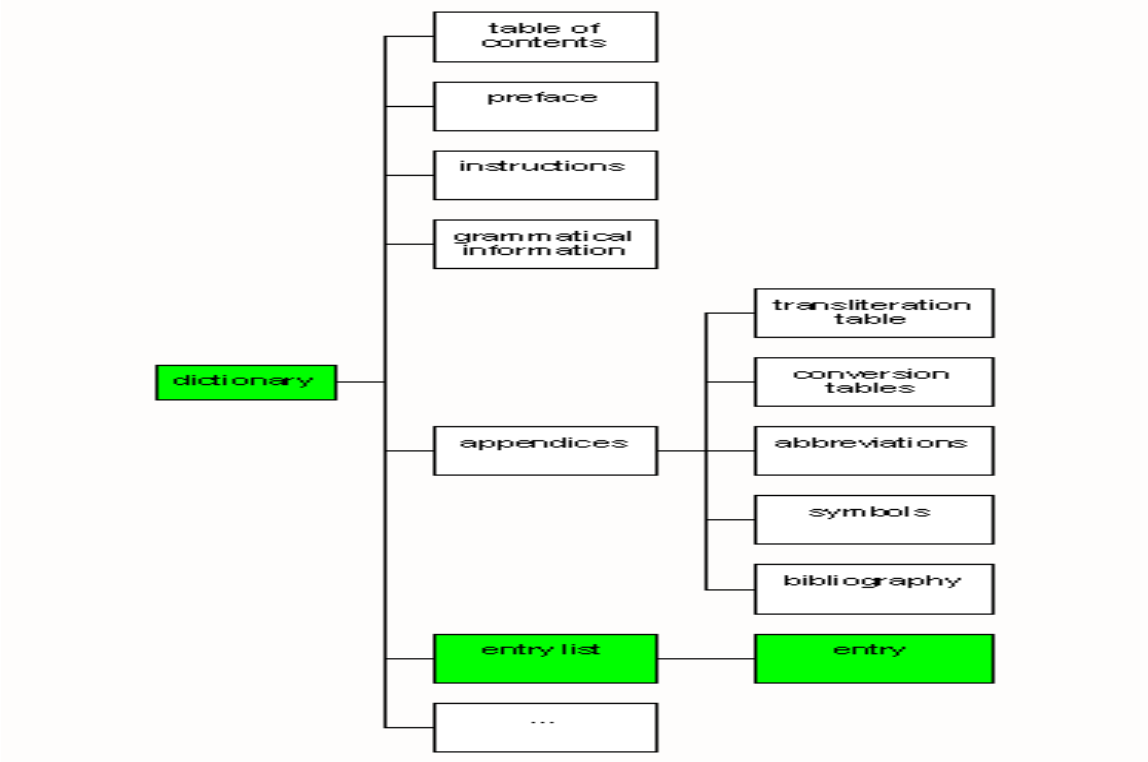
A dictionary is structured at three levels below the level of the dictionary as a whole:

- the dictionary as a whole has a framing structure which comprises a set of main sections that correspond to the chapters of a book;

- a subset of these sections – mostly only one – comprises an entry list. The structure of each of these sections is a macrostructure (or the macrostructure of the dictionary);

- each of the entries in a macrostructure has an internal structure of its own, which is the microstructure of the entries of that list (thus, if the dictionary contains only one word list, the microstructure of the dictionary).

The structure of a dictionary is visualized as follows (pict. 1).



Picture 1 - The structure of a dictionary

Dictionary articles are a type of article that explains and gives basic information about technical terms of linguistics. They contrast with survey articles, which are articles about particular phenomena.

All ordinary dictionary articles should have a very similar structure: They should consist of sections with identical headings and occur in the same order. Only the first section (Definition) is obligatory. Some of the sections will be irrelevant for some terms. In most cases, however, a nonexisting section means that the work of writing it has not been done yet.

All dictionary articles may also contain quotations from prominent places in the literature where the term is mentioned (defined, criticized, its orgin discussed, etc.)

Here is an ordered list of dictionary article **sections**:

1. Definition: This section contains a succinct definition of the term, usually in a single complete sentence.

2. Term properties: This section may contain information on pronunciation, inflection, and derivational possibilities.

3. Examples: This section may contain concrete examples of the phenomenon described by the term.

4. Comments: This section is for any kinds of comments on the definition or on the term.

5. Subtypes: This section may contain a list of subtypes of the phenomenon.

6. Polysemy: This section may contain a list of other meanings that this term also has.

7. Synonyms: This section may contain a list of other terms that also have this meaning.

8. Origin: This section may contain information on the origin and history of the term.

9. See also: This section may contain a list of linked related terms that are relevant but that do not appear in any of the other sections (e.g. relative pronoun in the article relative clause).

10. References: This section contains a list of full references corresponding to the author-year references mentioned elsewhere in the article.

11. Other languages: This section may contain the equivalents of the term in other languages.

The main parts of a dictionary definition are entry word, guide words, pronunciation, part of speech, definition, and origin.

Topic 6 Electronic dictionaries in modern linguistics. Online dictionaries, glossaries, encyclopedias and reference books

1. Electronic dictionaries in modern linguistics.
2. The classifications of the electronic dictionaries.
3. Online dictionaries.
4. Glossaries. A bilingual glossary.
5. Encyclopedias. Thesauruses.
6. Reference books.

Electronic dictionary is a computer database of the entries specifically coded to facilitate quick search of the words with regard to morphological form and with the possibility of searching word combinations (word usage) and changing the direction of translation (for example Ukrainian-Russian or Russian-Ukrainian).

Electronic dictionary is a special lexicographic characterized by non-linear textual structure (the scope of which depends on a user's queries), inside and outside search, harmonic combination of different types of information (phonetic, semantic, encyclopedic etc.) in one entry, verbal and non-verbal means of information representation and possibility of connecting with other information resources.

The electronic dictionaries (not machine-oriented dictionaries) **can be classified** in the same way as paper dictionaries: *encyclopedic* and *linguistic* dictionaries. Linguistic dictionaries can be monolingual and bi-, multilingual. To linguistic dictionaries can be attributed those including vocabulary/terminology of different areas and those covering sing area. As a result of recent developments

in computer lexicography it has become possible to combine linguistic and encyclopedic information of lexical units in electronic dictionary. As for word list arrangement, linguistic dictionaries can be *alphabetically-ordered* and *thesauri*. Regarding language varieties, electronic dictionaries fall into normative dictionaries, or literary language dictionaries, regional dialect dictionaries and social-group dialect dictionaries.

The electronic dictionaries are proposed to be **classified** both *by conventional parameters:*

1) vocabulary (general-purpose or special-purpose dictionaries),

2) number of languages (monolingual, bilingual and multilingual dictionaries),

3) destination (translation, explanatory dictionaries etc. or complex dictionaries);

4) adherence to language norms: (dictionaries of literary or spoken language); and *by criteria peculiar only to computer lexicography*:

— linguistic (textual and hypertextual dictionaries, with hypertext linking the entries and outer language resources, such as Wikipedia, Lingvo.pro etc.);

— dichotomy "paper dictionary—electronic dictionary" (based on a paper dictionary and newly developed);

— availability of terms used in one or several areas in case of terminology dictionaries (dictionaries containing terms to be used in a single or several areas);

— information form: textual dictionaries, audio dictionaries and video dictionaries.

The example of audio dictionary is a dictionary of Ukrainian dialects of Donetsk region and the example of a video dictionary is online encyclopedia of distinguished people the video materials of which are devoted to outstanding painters, scientists, military leaders and politicians.

A dictionary is a collection of words in one or more specific languages, listed alphabetically, with usage information, definitions, etymologies, phonetics, pronunciations, and other information.

Dictionaries are useful for more than just looking up definitions. A historical dictionary like the Oxford English Dictionary includes full etymologies, and dated quotations to show shifting meanings over time.

An encyclopedia is a type of reference work a compendium holding a summary of information from either all branches of knowledge or a particular branch of knowledge.

Encyclopedias may have an important role in the early stages of your research. They provide a general overview of a subject, and aim to present objective data (names, dates, and facts that can be independently verified). They may help you to identify areas of controversy or special interest from which you can pursue further research and interpretive criticism.

A thesaurus is a book that lists words in groups of synonyms and related concepts.

A glossary is a list of terms in a special subject, field, or area of usage, with accompanying definitions; or a list at the back of a book, explaining or defining difficult or unusual words and expressions used in the text.

It is an alphabetical list of words relating to a specific subject, text, or dialect, with explanations; a brief dictionary.

A glossary also known as a vocabulary or clavis, is an alphabetical list of terms in a particular domain of knowledge with the definitions for those terms. Traditionally, a glossary appears at the end of a book and includes terms within that book that are either newly introduced, uncommon, or specialized. While glossaries are most commonly associated with non-fiction books, in some cases, fiction novels may come with a glossary for unfamiliar terms.

A bilingual glossary is a list of terms in one language defined in a second language or glossed by synonyms (or at least near-synonyms) in another language.
In a general sense, a glossary contains explanations of concepts relevant to a certain field of study or action. In this sense, the term is related to the notion of ontology. Automatic methods have been also provided that transform a glossary into an ontology or a computational lexicon.

A reference book is a source that provides facts &/or finite pieces of information; this can be general (Encyclopedia Britannica) or more subject focused (Encyclopedia of Women and Baseball). They are sources designed not to be read cover to cover but to be used to get key facts about a topic (think dictionary or almanac). These materials don't circulate (they have to be used in the Library) so that everyone can use the material. Reference books are a great place to start your research, find general history/background information as well as important people, dates &/or terms related to your topic.

Reference books are usually organized alphabetically but using the Index (the back section of a book or group of books that alphabetically lists the headings including people, places and subjects with corresponding page numbers) can be a quick way to find the information you need.

Topic 7 Working with programs. Internet Explorer features. Internet Explorer window. Navigation on the pages of the Web-site

1. Working with programs.
2. Internet Explorer and its features.
3. Browser. The main functionalities of browsers.
4. Internet Explorer window.
5. Search engines. The types of search engines.
6. The World Wide Web (WWW). Web navigation.

Internet Explorer (formerly Microsoft Internet Explorer and Windows Internet Explorer, commonly abbreviated IE or MSIE) is a series of graphical web browsers developed by Microsoft and included in the Microsoft Windows line of operating systems, starting in 1995. It was first released as part of the add-on package Plus! for Windows 95 that year. Later versions were available as free downloads, or in-service packs, and included in the original equipment manufacturer (OEM) service releases of Windows 95 and later versions of Windows. New feature development for the browser was discontinued in 2016 in favor of new browser Microsoft Edge. Since Internet

Explorer is a Windows component and is included in long-term lifecycle versions of Windows such as Windows Server 2019, it will continue to receive security updates until at least 2029. Microsoft announced in August 2020 that as of August 2021, web-based Microsoft 365 products will no longer support Internet Explorer, while Microsoft Teams ended support for IE earlier in November 2020.

Internet Explorer has been designed to view a broad range of web pages and provide certain features within the operating system, including Microsoft Update. During the heyday of the browser wars, Internet Explorer superseded Netscape only when it caught up technologically to support the progressive features of the time.

The features of Internet Explorer:

1. Hardware-accelerated graphics mean better visuals. Microsoft.
2. New tabs page for your favorite sites.
3. New, unobtrusive notifications bar.
4. The "One Box" displays websites, search results, and more.
5. Pin your favorite sites to the taskbar.
6. Keep your tabs organized.
7. Explorer now integrates with Windows 7.
8. Better crash recovery.

A special browser program is installed on your computer to view web pages, which can perform hypertext format conversions. **Browser** is a program designed to view hypertext documents. *The main functionalities* of browsers include:

- display text information of the web page, as well as playback of sound, animation, video;
- transition between web pages by using hyperlinks;
- search web pages for the specified keywords or phrases;
- automatic creation of a list of web sites that have been visited before, to speed up access to data;
- display of active components; these objects contain not only data, but program code; active components when displayed on the screen perform work according to the built-in program.

Modern browsers support not only the HTTP protocol needed to view hypertext. Browsers typically provide e-mail and teleconferencing, access to FTP, voice, and video files. There are currently dozens of browsers that have different capabilities and interface. The most popular browsers are Internet Explorer and Opera, which have about the same capabilities. Internet Explorer is included with the Windows operating system, as a result of which it is more widespread in Ukraine.

Internet Explorer window. You can start the Internet Explorer program using the shortcut that is usually located on the desktop, or through the Start menu. Internet Explorer window has a standard view of the Windows application. The window contains the following basic elements: title bar, application menu, toolbar, address bar, workspace, status bar.

Often users do not know the exact URL of the required web page, they need to find information on a particular topic, such as birds in Ukraine. You can use helpful Internet resources to solve your problem. To simplify the search for the necessary information on the Internet, there are special **web sites**, which contain mainly hyperlinks to other pages. Such nodes are called **search engines.** There are several **types** of search engines on the Internet, the most common of which are search engines and search directories. **The principles** of the search pointer are as follows: after connecting to it, you should type a query or a few words. After clicking the search button, the system lists the hyperlinks to the web page, where the entered words appear. Usually search engines provide a list in such a way that the hyperlinks of the pages on which the given words meet more often are located.

Domain addresses of the most powerful and popular search engines in Ukraine: www.meta.ua, www.google.com.ua, www.yahoo.com, etc.

In addition, many other sites can also be searched, as these sites have links to designated and other search engines. For each search engine of the system there is a syntax for query formulation. The following are *the most common rules:*

1. If several words are requested, they must be contained in the wanted document, and not necessarily in order. For example, the task of the words of the birds of Ukraine will reveal documents in which the words and birds of Ukraine.

2. If you need to find documents in any of these words, use the sign "|". For example, the keywords of birds | animals of Ukraine in the search results will provide links to pages that contain the word Ukraine and any words of birds or animals.

3. If the phrase is taken in the quotation marks "Birds of Ukraine", then there will be a search for these words in the same format and in that order.

In general, when searching for the necessary information, the following **principles** should be followed: the query should be formulated as specifically as possible in order to avoid a large number of answers (for example, the query birds of Ukraine in the meta.ua system finds links to more than 2500 web pages); if the necessary information is not found, it is necessary to reformulate the request in other words.

The World Wide Web (WWW) is mostly used on the Internet. The Web refers to a body of information, while the Internet refers to the physical side of the global network containing a large amount of cables and computers.

To view **web pages**, a special browser program is installed on your computer, which allows you to view hypertext documents. One of the most common browsers is Internet Explorer, which is included with the Windows operating system. This browser window has a standard Windows interface. In the address bar of the browser, the user must enter the address of the required web page, after which the browser ensures the receipt of this page and its review. If the user does not know the desired address, he can use search engines - search pointers and directories. Search indexes allow keywords to find the web space needed web pages.

Web navigation refers to the process of navigating a network of information resources in the World Wide Web, which is organized as hypertext or hypermedia. The user interface that is used to do so is called a web browser.

A central theme in web design is the development of a web navigation interface that maximizes usability.

A website overall navigational scheme includes several navigational pieces such as global, local, supplemental, and contextual navigation; all of these are vital aspects of the broad topic of web navigation. Hierarchical navigation systems are vital as well

since it is the primary navigation system. It allows for the user to navigate within the site using levels alone, which is often seen as restricting and requires additional navigation systems to better structure the website. The global navigation of a website, as another segment of web navigation, serves as the outline and template in order to achieve an easy maneuver for the users accessing the site, while local navigation is often used to help the users within a specific section of the site. All these navigational pieces fall under the categories of various types of web navigation, allowing for further development and for more efficient experiences upon visiting a webpage.

Content module 3 Internet-technologies in translation activity and their possibilities. Machine translation systems

Topic 8 The social significance of network communications. PC local area networks. What is client-server technology. Development, regulation and access to the Internet

1. The social significance of network communications.
2. Advantages and Disadvantages of Social Networking.
3. Pros and Cons of network communications.
4. A local area network (LAN). Client/ Server technology.
5. Development, regulation and access to the Internet.

Social network is a network of social interactions and personal relationships; or a dedicated website or other application which enables users to communicate with each other by posting information, comments, messages, images, etc.

Social networking is the use of Internet-based social media sites to stay connected with friends, family, colleagues, customers, or clients. Social networking can have a social purpose, a business purpose, or both, through sites like Facebook, Twitter, LinkedIn, and Instagram. Social networking has become a significant base for marketers seeking to engage customers.

Key Takeaways:

1. Social networking is the use of Internet-based social media platforms to stay connected with friends, family, or peers.
2. The most popular social networking sites in the U.S. include Facebook, Instagram, and Twitter.
3. Marketers use social networking for increasing brand recognition and encouraging brand loyalty.
4. Social media can help connect people and businesses and help promote brand awareness.
5. There are disadvantages related to social media, including the spread of misinformation and the high cost of using and maintaining social network profiles.

Social networking involves the development and maintenance of personal and business relationships using technology. This is done through the use of social networking sites, such as Facebook, Instagram, and Twitter. These sites allow people and corporations to connect with one another so they can develop relationships and so they can share information, ideas, and messages.

Advantages and Disadvantages of Social Networking

Social networking has the ability to affect both individuals and corporations—both positively and negatively. That's why it's important to weigh out both the advantages and disadvantages of using these social media sites.

Advantages

As mentioned above, social networking allows individuals to keep in contact with family and friends they would otherwise not be able to connect with because of distance or because they simply lost touch. People can also connect with other individuals who share the same interests and develop new relationships.

Social networking also allows companies to connect with new and existing clients. They can also use social media to create, promote, and increase brand awareness. They also rely on reviews and comments made by their clientele. The more customers post about a company, the more valuable the brand authority becomes. This

leads to more sales and a higher ranking in search engines. Social networking can, therefore, help establish a brand as legitimate, credible, and trustworthy.

A company may use social networking to demonstrate its customer service level and enrich its relationships with consumers. For example, if a customer complains about a product or service on Twitter, the company may address the issue immediately, apologize, and take action to make it right.

Disadvantages

Social networking can have a big impact on the spread of misinformation. And it can spread like wildfire. This became increasingly prevalent after 2012. This information starts as rumors, which spread faster than facts. One study found that misinformation is 70 % more likely to be shared than factual information on Twitter.5

Networking on social media can have just as much of a detrimental impact on companies. Criticism of a brand can spread very quickly on social media. This can create a virtual headache for a company's public relations department.

Although social networking itself is free, building and maintaining a company profile takes hours each week. Costs for those hours add up quickly. In addition, businesses need many followers before a social media marketing campaign starts generating a positive return on investment (ROI). For example, submitting a post to 15 followers does not have the same effect as submitting the post to 15,000 followers.

Pros:

1. People can use social media to connect with others, including friends, family, and those with the same interests.
2. Companies can use social networks to reach new and existing clients, and to build and improve their brand name.
3. Corporations that use social media can connect with their clients and demonstrate the level of their customer service.

Cons:

1. Social media helps spread misinformation.
2. Criticism of companies can spread quickly, causing problems for their public relations departments.

3. Advertising and maintaining a corporate profile on social media can be costly.

The importance of network in the society

In the concept of the network society, the chief form of power is control or influence over communication. This is because connectivity and access to networks are essential to the power of some social groups to impose their values and goals on society-at-large and of others to resist their domination.

A local area network (LAN) is a computer network that interconnects computers within a limited area such as a residence, school, laboratory, university campus or office building. By contrast, a wide area network (WAN) not only covers a larger geographic distance, but also generally involves leased telecommunication circuits. Ethernet and Wi-Fi are the two most common technologies in use for local area networks. Historical network technologies include ARCNET, Token Ring, and AppleTalk.

LAN consists of a series of computers linked together to form a network in a circumscribed location. The computers in a LAN connect to each other via TCP/IP ethernet or Wi-Fi. A LAN is normally exclusive to an organization, such as a school, office, association or church.

Client/ Server technology is a means for separating the functions of an application into two or more distinct parts. Client/ server describes the relationship between two computer programs in which one program, the client, makes a service request from another program, the server, which fulfills the request. The client presents and manipulates data on the desktop computer. The server acts like a mainframe to store and retrieve protected data. It is network architecture in which each computer or process on the network is either a client or a server. Servers are powerful computers or processes dedicated to managing disk drives (file servers), printers (print servers), or network traffic (network servers). Clients are PCs or workstations on which users run applications. Clients rely on servers for resources, such as files, devices, and even processing power.

A client/ server model has following *three distinct components*, each focusing on a specific job:

1. Database server
2. Client application
3. Network.

Client/server is an important idea in a network, however, it can be used by programs within a single computer. In a network, the client/ server model provides a convenient way to interconnect programs that are distributed efficiently across different locations. Computer transactions using the client/ server model are very common. For example, to check your bank account from your computer, a client program in your computer forwards your request to a server program at the bank. That program may in turn forward the request to its own client program that sends a request to a database server at another bank computer to retrieve your account balance.

Client-server is a computer model that separates client and server, and usually interlinked using a computer network. Each instance of a client can send data requests to one of the servers online and expect a response. In turn, some of the available servers can accept these requests, process them and return the result to the client. Although the concept be applied to various uses and applications, the architecture is almost the same.

Often clients and servers communicate through a computer network with separate hardware, but the client and server can reside on the same system. The machine is a host server that is running one or more server programs that share their resources with clients.

A client does not share its resources, but requests content from a server or service function. Clients, therefore, initiate communication sessions with the servers that wait for incoming requests.

Regulation on access to Internet is a tool that is crucial to the growth of any nation. Some problems arise as attempts to implement regulation on access to Internet are concerned in both developing and developed countries. For example, privacy and lack of it on online information is a subject that has challenged the existing legal and regulatory infrastructure of access to Internet. Other problems to Internet access include: inadequate Internet regulations, inappropriate legislation, security, piracy, hacking online transaction, cyber crime, unsolicited e-mail, racism and xenophobia. To

overcome these problems, some remedies are necessary. Regulation for user and internet service providers, provision of security of systems, Education, content restrictions on unsolicited mails, continued assessment of the internet and protection against access to illegal information is solutions suggested. The paper concludes by looking at how academic institutions, work places, business atmospheres have access to Internet and the need to strengthen the current legislation and enforce procedures not only to system administrators but also to employees. Finally a recommendation of computer policy in organizations is made towards achieving a controlled access to the Internet.

Topic 9 The use of information resources of the global Internet in the work of the translator. Search engines. Theory and practice of information retrieval systems. Features of linguistic search on the Internet. Sites for translators and linguists

1. The use of information resources of the global Internet in the work of the translator.
2. The Online Search Engines and Dictionaries Translation.
3. Information retrieval. Areas where information retrieval techniques are employed.
4. The best translation websites.

The Internet technology provides great help for the translation to a certain extent, the translator can solve many difficulties in the translation practice with the help of the network information resources, including resource sharing and network translation tools, sometimes they might even find corresponding version directly and examine the correctness of translation through the machine translation, thus making the translation more efficient and accurate.

The increasing globalization the frequent exchange and cooperation with foreign countries and the growing demand of information localization have brought the unprecedented market opportunity for translation service providers and promoted the

industrialization of translation, and the informationization of translation is an important way to realize it, which means accomplishing the modernization of translation by using computer, the auxiliary translation software, the Internet, various of retrieval tools, speech input tools etc.

Generally, many people regard that translation ability involves *bilingual* and *bicultural* ability and some translation skills, most researchers home and abroad regard the translation ability as a kind of language transformation and communication, but some researchers mentioned the ability of application of assistant translation tools. Although the cognition foundation of the specialized translation comes from the bilingualism or foreign language user's cognition skill, the ability involved discourse transformation also contains some knowledge structures that do not belong to the bilingual ability. In the process of translation, the translator will use various interdisciplinary knowledge and skills to complete a task, such as a specific subject knowledge, world knowledge, research skills, and cognitive potential, as well as strategies for tackling problems. Thus, translation not only involves the communicative abilities of the language itself, but also the translator's ability to use tools to complete the translation task in the translation process.

The Online Search Engines and Dictionaries Translation is a complex activity which involves knowledge of many fields, no matter what type of translation belongs to, there are two phases: comprehension and presentation. Usually the difficulties of translation are not caused by the incomprehensible words, but due to the lack of background knowledge, especially when translating unfamiliar materials, the translator must know the basic background knowledge, but the translator’s personal knowledge and information are limited, so translators need to have a large number of reference materials, such as encyclopedia, dictionaries, and so on. But it’s very difficult for the translators to own these traditional references due to the objective conditions. Now, the network provides a huge shared data bank for the translator, which includes encyclopedia, the dictionaries and some special resources. All of these provide many conveniences to the resolution of translation difficulties. With the network technology, the translator can find related information to get a general understanding of the related

subject through search engines, online encyclopedia, electronic dictionary, online terminology and online newspapers and magazines, thus the translation quality can be improved by reducing understanding errors. As time passes, the translator will use these knowledge in the later translation practice, thus the translator's ability to understand will be expanded and enriched. Along with the technical and social development, the new-created things make the language renewed greatly. The advantages and characteristics of the network retrieval with the rapid development of Internet and the swift growth of network information, the network search engine has obtained more and more favor of scholars, researchers and translator's .The Internet is a free giant corpus to the translators. It is very convenient for translators to use search engine to search related knowledge, the idiomatic translation of words and expressions, thus enhancing the translation efficiency and quality. It should say that the inquiry way of Internet search is a basic skill to the E - time translators. The network inquiry is time-saving and effort-saving. Take Google as an example.

Information retrieval (IR) is the process of obtaining information system resources that are relevant to an information need from a collection of those resources. Searches can be based on full-text or other content-based indexing. Information retrieval is the science of searching for information in a document, searching for documents themselves, and also searching for the metadata that describes data, and for databases of texts, images or sounds.

Automated information retrieval systems are used to reduce what has been called information overload. An IR system is a software system that provides access to books, journals and other documents; stores and manages those documents. Web search engines are the most visible IR applications.

An information retrieval process begins when a user enters a query into the system. Queries are formal statements of information needs, for example search strings in web search engines. In information retrieval a query does not uniquely identify a single object in the collection. Instead, several objects may match the query, perhaps with different degrees of relevancy.

An object is an entity that is represented by information in a content collection or database. User queries are matched against the database information. However, as opposed to classical SQL queries of a database, in information retrieval the results returned may or may not match the query, so results are typically ranked. This ranking of results is a key difference of information retrieval searching compared to database searching.

Depending on the application the data objects may be, for example, text documents, images, audio, mind maps or videos. Often the documents themselves are not kept or stored directly in the IR system, but are instead represented in the system by document surrogates or metadata.

Most IR systems compute a numeric score on how well each object in the database matches the query, and rank the objects according to this value. The top ranking objects are then shown to the user. The process may then be iterated if the user wishes to refine the query.

Areas where information retrieval techniques are employed include:

-- general applications;

-- digital libraries;

-- information filtering;

-- recommender systems;

-- media search;

-- blog search;

-- image retrieval;

-- 3d retrieval;

-- music retrieval;

-- news search;

-- speech retrieval;

-- video retrieval;

-- search engines;

-- site search;

-- desktop search;

-- enterprise search;

-- federated search;

-- mobile search;

-- social search;

-- web search.

Language scientists and technologists are increasingly turning to the web as a source of language data, because other resources are not large enough, because they do not contain the types of language the researcher is interested in, or simply because it is free and instantly available. The default means of access to the web is through a search engine such as Google. While the web search engines are dazzlingly efficient pieces of technology and excellent at the task they set themselves, for the linguist they are frustrating. The search engine results do not present enough instances (Google sets a limit of 2000) or enough context for each instance (Google generally provides a ca 10-word fragment), they are selected according to criteria which are, from a linguistic perspective, distorting, and they do not allow searches to be specified according to linguistic functions such as lemmatization and word class. Each of these goals could straightforwardly be resolved, but approaches to Google to date have gone unanswered. However this suggests a better solution: rather than depend upon existing search engines, it would be far better to set up a linguistic search engine, dedicated to linguists' interests. Then the kinds of processing and querying would be designed explicitly to meet linguists' desiderata, without any conflict of interest or 'poor relation' role. Once this is set up, large numbers of possibilities open out. All those processes of linguistic enrichment and `linguistic data mining' which have been applied with impressive effect to smaller corpora could be applied to the web so that web searches could be specified in terms of linguistically interesting units such as lemmas, word classes, and constituents (e.g. noun phrase) rather than strings. Thesauruses and lexicons could be developed directly from the web. The way would be open for further anatomizing of web text types and domains, both a topic of interest in itself and one where strategies would be needed so that web-based lexical resources could be developed for specific text types or domains, or so that the biases of the web could be countered to provide

‘general languages’ and ‘sublanguage’ resources from the web. All of this can potentially be done for all of the many languages for which there is ample data on the web. The web, teeming as it is with language data, of all manner of varieties and languages, in vast quantity and freely available, is potentially a fabulous linguists’ playground. The Linguistic Search Engine will bring that dream closer to reality.

And to help you choose the best service among the thousands, we have combed through the internet to bring you **8 of the best translation websites:**

1. Google Translate.
2. Yandex Translate.
3. Bing Translator.
4. Reverso.
5. Translatedict.
6. MyMemory Translation.
7. Babylon Translator.
8. PROMT Online Translator.

There are also a lot of other translation websites. For example:

Upwork

With over 1.5 million clients, Upwork is the self-proclaimed “world’s leading freelancing website”. Companies post jobs that freelancers respond to and freelancers promote their skills available to browse by various organizations. There are over 3,500 skills listed on Upwork! There is plenty of opportunities to mine language service-related jobs through this site and it would be a great place to start to build your portfolio.

Fiverr

Fiverr is a freelancing website that is very popular across the globe making it a great place to advertise your language service skills and acquire new clients. Fiverr targets entrepreneurs and small businesses looking for a lean growth strategy and medium-large size organizations frequent this site as well. “Writing & Translation” is a category on the home page and the global network makes it a great place for interpreters or translators to find opportunities and begin to cultivate relationships.

Guru

Guru allows users to easily showcase their work experience and matches freelancers with job posts that fit their skills. Guru boasts 1, 5 million users and will surely offer many opportunities if time is spent to find them!

Translators Town

Translators Town is similar to Upwork and Fiverr in that freelancers bid on jobs they'd like to take. An obvious advantage of this website is that it is strictly for translators. However, if you'd like to bid on jobs, you will have to pay 75 dol. per year. Otherwise, you will have to be invited to bid on a job by a client.

Indeed

Indeed is a popular job posting website. Unlike the freelancing websites discussed above, through Indeed you can search for full-time positions (yes, they exist for interpreters and translators if that is what you desire!) or part-time positions.

LinkedIn

LinkedIn is not to be overlooked when it comes to business opportunities. Many language service companies use LinkedIn to recruit interpreters and translators. Organizations of all sizes use it to post job opportunities. Leverage your professional social network to showcase your skills and work and you're sure to uncover hidden opportunities.

Topic 10 The concept of machine translation. Machine translation systems. Varieties of machine translation

1. The concept of machine translation.
2. The main tasks of MT.
3. Specifics of machine translation and its stages.
4. Typical MT errors.

The task of machine translation

A powerful area of applied linguistics is machine translation. This trend began to develop in the mid-20th century. It is aimed at creation of automatic translation

systems from one language to another mainly scientific, technical and business texts. What can explain the style machine translation restrictions?

Experiment with using a computer to translate from one languages to another are fundamental to linguistics. They provide an opportunity to study the translation process, which is normal conditions occur covertly and cannot be described in detail. However, the transfer of the translator's functions to the automatic device is detected possible only if the exact rules of translation, so there is a need to organize special dictionaries and grammars fortranslation machine.

The main tasks of MT are:

1) the formation of theoretical and experimental-statistical base of translation, which involves the development syntactic, morphological, semantic, vocabulary systems and their analyzers, transformation rules and their limitations, models transfer intermediary languages, approaches to source text synthesis or phrases;

2) creation of practical models of binary translation, oriented in two languages, or invariant, which work regardless of the type of language;

3) ensuring the relevance of the choice of equivalents based on multivariate solutions and their lexical and syntactic filtering (by developing models syntactic control, feedback between meaning and text, multilevel organization of language);

4) development of existing automatic orautomated machine translation systems;

5) improvement of existing ones models due to the intellectualization of machine translation on the basis introduction of cognitive components of declarative and procedural knowledge (knowledge of the world, branch of science or technology, procedures of intervention, forecasting the development of the described situations given the presence of structures interpretation of the situation, etc.).

Specifics of machine translation and its stages

Operating units of machine translation, which uses the principle of "synthesis through analysis" are:

1) parser - syntactic (or in other modules - phonetic and morphological) analysis of the input text using the lexicon and grammar;

2) transfer - the use of intermediate levels of representation input text using intermediary languages, knowledge structures, lexical and syntactic filters, etc.;

3) synthesis of the source text on the basis of grammar and lexicon of language source text and intermediate level information.

In today's world there is a growing demand for automatic translation systems through the constant change and replenishment of the information field a world that requires instant and fast processing of information flows in many languages. The practice of machine translation systems shows 20 % the rate of errors in the output texts due to the shortcomings of the dictionary and weak algorithmic synthesis of sentences with incorrect syntactic structure. Therefore, the role of automated translation systems is growing human factor. Given this, the areas of training with machine translation is also:

1) mastering post-editing skills translations performed by automated systems;

2) preparation, coordination and control over the work of MT users;

3) learning the method replenishment of lexical dictionaries, terminological bases of translation knowledge software packages, etc.

Typical MT **errors** that require human intervention as text proofreader is:

- untranslated words;
- disregard for polysemy or stylistic marker of the unit;
- literal translation of idioms;
- errors in translating prepositions;
- violation of coordination or management;
- unauthorized homonymy;
- errors in the translation of structures, etc.

Assessment of the quality of translation is based on a comparison of the original with translation, comparison of translation with “inverted” translation, by testing by expert assessments when comparing content and form.

3 METHODOLOGICAL RECOMMENDATIONS FOR THE ORGANIZATION OF INDEPENDENT WORK OF STUDENTS

TASKS FOR INDEPENDENT WORK

Topics of abstracts on the discipline "Fundamentals of applied linguistics"

1. Modern areas of applied linguistics
2. The role of applied linguistics in the language policy of the state
3. Language policy of the state.
4. Language system.
5. Basic concepts of sociolinguistics.
6. Social and territorial differentiation of language.
7. Sociological research in language.
8. Language policy of the world.
9. Scientific and linguistic pictures of the world.
10. The concept of structural and mathematical linguistics.
11. Basic concepts of lexicography.
12. Linguistic support of information systems.
13. Computerization of dictionaries.
14. Machine translation. Machine translation systems.
15. Linguistic aspect of creating artificial intelligence.
16. Psycholinguistics. Psychological aspects of linguistic research.
17. Fundamentals of the theory of speech activity.
18. Theories of the processes of generation and perception of speech.
19. Experiment in psycholinguistics.
20. Neurolinguistic programming.
21. Basic concepts of communicative linguistics.
22. Comparative aspect of linguistics.
23. Language and culture.
24. Interlingual and intercultural communication.
25. Basic concepts of cognitive linguistics.

26. Basic concepts of interlinguistics.

27. International artificial languages.

Questions for the test

1. Definitions of the term “applied linguistics”.
2. Major branches of applied linguistics.
3. History of development and prospects of development of applied linguistics.
4. The main areas of applied linguistics.
5. The problems of applied linguistics.
6. Subject of applied linguistics.Object of applied linguistics.
7. Tasks of applied linguistics.
8. Methods of applied linguistics.
9. The main directions of Applied Linguistics.
10. Hypertext technologies of text presentation.
11. The differences between text and hypertext.
12. Simple and complex hypertext.
13. Computational linguistics as an applied linguistic discipline.
14. Information retrieval, its object and tasks.
15. An information search and the search engine.
16. Lexicography as a science of compiling dictionaries.
17. Typology of dictionaries.
18. Structural parts of the dictionary.
19. The dictionary article sections.
20. Electronic dictionaries in modern linguistics.
21. The classifications of the electronic dictionaries.
22. Online dictionaries.
23. Glossaries. A bilingual glossary.
24. Encyclopedias. Thesauruses.
25. Reference books.
26. Working with programs.

27. Internet Explorer and its features.
28. Browser. The main functionalities of browsers.
29. Internet Explorer window.
30. Search engines. The types of search engines.
31. The World Wide Web (WWW). Web navigation.
32. The social significance of network communications.
33. Advantages and Disadvantages of Social Networking.
34. Pros and Cons of network communications.
35. A local area network (LAN). Client/ Server technology.
36. Development, regulation and access to the Internet.
37. The use of information resources of the global Internet in the work of the translator.
38. The Online Search Engines and Dictionaries Translation.
39. Information retrieval. Areas where information retrieval techniques are employed.
40. The best translation websites.
41. The concept of machine translation.
42. The main tasks of MT.
43. Specifics of machine translation and its stages.
44. Typical MT errors.

LIST OF RECOMMENDED READING

Basic

1. Волошин В. Г. Комп'ютерна лінгвістика : навч. посібник / В. Г. Волошин. – Суми : ВТД «Університет. Книга», 2004. – 382 с.

2. Глинський Я. М. Практикум з інформатики : навч. посібник / Я. М. Глинський. – Львів : Деол, СПД Глинський, 2003. – 224 с.

3. Глушаков С. В. Персональный компьютер / С. В. Глушаков, А. С. Сурядный. – 5-е изд., доп. и перераб. – Харьков : Фолио, 2003. – 503 с.

4. Использование ЭВМ в лингвистических исследованиях / под ред. В. И. Перебейнос. – Київ : Наук. думка, 1990. – 228 с.

5. Карпіловська Є. А. Вступ до прикладної лінгвістики: комп'ютерна лінгвістика / Є. А. Карпіловська. – Донецьк : ТОВ «Юго-Восток, Лтд», 2006. – 188 с.

6. Меньшиков И. И. Модель предложения и его парадигма / И. И. Меньшиков. – Донецк : ДГУ, 1979. – 80 с.

7. Нортон П. Windows98 : пер. с англ. / П. Нортон, Дж. Мюллер. – СПб.: БХВПетербург, 2001. – 592 с.

8. Огурцов А. П. Компьютерна техніка та програмування. Лабораторний практикум : Навч. посібник / А. П. Огурцов, І. К. Карімов, Л. М. Мамаєв. – Київ, 2000. – 335 с.

9. Основы компьютерной грамотности / под ред. А. А. Стогния. – Київ : Выща шк., 1988. – 216 с.

10. Пещак М. М. Нариси з комп'ютерної лінгвістики / М. М. Пещак. – Ужгород : Закарпаття, 1999. – 200 с.

11. Севбо И. П. Графическое представление синтаксических структур и стилистическая диагностика / И. П. Севбо. – Київ : Наук. думка, 1981. – 192 с.

12. Стахмич Ю. С. Прикладна лінгвістика та інформатика: лабораторний практикум / Ю. С. Стахмич, В. Д. Мельник. – Івано-Франківськ : ІФНТУНГ, 2017. – 96 с.

13. Інформатика та комп'ютерна техніка. Програмне забезпечення ЕОМ : навч. посіб. Харківського аграрного університету ім. В. В. Докучаєва / [П. А. Щербаков, О. В. Ульянченко та інші]. – Харків, 2001. – 292 с.

14. The Handbook of Applied Linguistics / Alan Davies, Catherine Elder, Eds. – Oxford: Blackwell Publishing Ltd, 2004. – 866 p.

15. A guide in APPLIED LINGUISTICS for students of Linguistics / complied by V. Yakuba from the Routledge Handbook of Applied Linguistics, ed. James Simpson, 2011. – Kyiv, 2013.

Additional

16. Голубовська І. О. Етнічні особливості мовних картин світу / Ірина Олександрівна Голубовська. – Київ : Логос, 2004. – 284 с.

17. Использование ЭВМ в лингвистических исследованиях / Т. А. Грязнухина и др. – Киев, 1990.

18. Додж М. Эффективная работа с Excel2000 / М. Додж, К. Стинсон. – СПб, 2000.

19. Жайворонок В. В. Українська етнолінгвістика: нариси / Віталій Жайворонок. – Київ : Довіра, 2007. – 262 с.

20. Клименюк А. В. Методология и методы научного исследования / А. В. Клименюк. – Киев : Милениум, 2005. – 186 с.

21. Кушнерик В. І. Фоносемантизм у германських і слов'янських мовах / В. І. Кушнерик. – Чернівці : Рута, 2004. – 415 с.

22. Левицький А. Е. Етнономіації у дзеркалі міжкультурної комунікації: монографія / А. Е. Левицький, Ю. В. Святюк. – Київ : Логос, 2011. – 192 с.

23. Лингвистические проблемы автоматизации редакционно-издательских процессов. – Киев, 1986.

24. Морфологический анализ научного текста на ЭВМ. – Киев, 1989.

25. Приходько А. М. Концепти і концептосистеми в когнітивно-дискурсивній парадигмі лінгвістики / А. М. Приходько. – Запоріжжя : Прем'єр, 2008. – 332 с.

26. Abbot V., The representation of scripts in memory / V. Abbot, J. Black, E. Smith // Journal of memory and language. – 1985. – № 24. – P. 179–199.

27. Chandler D. Semiotics: the basics / D. Chandler – London [etc.]: Routledge, 2007. – XVIII, 307 p.

28. Evans V. Cognitive linguistics: An Introduction / Vyvyan Evans and Melanie Green. – Edinburgh : Edinburgh University Press, 2006. – 830 p.

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