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| **Al-Farabi Kazakh National University****Syllabus** **(CTP 5302) Computer Technologies in Philology** **Spring semester 2016-2017 year**  |
| **Code of the Discipline** | **Title of the Discipline**  | **Type** | **Hours per week** | **Credits** | **ECTS** |
| **Lecture** | **Practice**  | **Lab** |
| CTP 5302 | Computer Technologies in Philology  | IEP 2 | 1 | 0 | 1 | 2 | 3 |
| **Prerequisites** | theoretical and practical disciplines (Introduction to Linguistics, General Linguistics, “History of Linguistics”) |
| **Lecturer:** | Sharipova Gulnara, candidate of philological sciences | **Office-hours** | According to the schedule |
| **e-mail** | Gulnara@mail.ru |
| **Telephones**  | 377-33-39 (1323), 221-13-23 | **Room**  | 309 |
| **Description of the Discipline** | to study deeply the basic theories and practice of innovative computer technologies in Linguistic Studies.  |
| **The aim of the course** | to determine application of modern information technologies in modern sciences; to generate the systemic representation about applicability and development of computer technologies in philological researches and in the linguistic analysis |
| **Outcomes**  | 1. to know to put the research task in the field of New Technologies in Linguistic Studies
2. to be able to work with the basic retrieval information and expert systems, systems of information processing of lexicography;
3. to be able to to use a professional achievements of native and foreign methodological heritage, modern teaching trends and concepts of teaching foreign languages;
4. to be able to to use the conceptual apparatus theoretical and applied linguistics to solve professional problems;
5. to be able to to use modern technologies for the collection, processing and interpretation of the experimental data;
6. to be able to to develop independently the actual problem, which has theoretical and practical significance.
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| **Literature and sources** | 1. Bolshakov I.A., Gelbukh A. Computational Linguistics. Models, Resources, Applications. México, 2004.
2. Kinnersley B. The Language List. Collected Information On About 2500 Computer

Languages, Past and Present. <http://people.ku.edu/~nkinners/LangList/> Extras/langlist.htm (дата обращения: 28.02.2012).**Available online:** as optional source you can download Praat doing Phonetics by Computer: www. Praat.nl  |
| **Organization of the course** | It is the introductory course in which it will be carried out the general acquaintance to great volume of a theoretical material, therefore during preparation for discipline the essential role is allocated to the textbook and the collection of problems. |
| **Requirement of the course**  | 1. For the auditory lesson you should be prepared in advance, according to the chart resulted below. Preparation of the task should be completed up before the auditory lesson on which the subject matter is discussed.2. Hometasks will be distributed during a semester, as shown in the chart of discipline.3. The majority of hometasks will include some questions which it is possible to answer, having executed inquiry about an example of a database; you will need to execute inquiries, and answers which you have received, to use for a following part of homework. At performance of hometasks following rules should be complied:* Hometasks should be observed in the specified timeframes. Later homeworks will not be accepted.
* The Hometask should be executed on one side of sheet of paper А4, and pages should be fastened under the order of numbering of questions (problems). Questions (problems) should be numbered, and final answers (if necessary) should be allocated. (house the tasks mismatching these standards, will be returned with a unsatisfactory assessment).
* You can work together with other student at performance of hometasks provided that each of you works on a separate question (a separate problem).
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| **Policy of the assessment**  | **Description of the Individual work** | **Percent** | **Outcomes** |
| HometaskIndividual AssessmentsExams Total | 35%25%40%100% | 1,2,34,5,62,3,44,5,61,2,3,4,5,6 |
| Your final assessment will be done according this formula  $Final Control of the discipline \frac{РК1+РК2}{2}∙0,6+0,1МТ+0,3FC$There are minimal assessment in percentage below:95% - 100%: А 90% - 94%: А-85% - 89%: В+ 80% - 84%: В 75% - 79%: В-70% - 74%: С+ 65% - 69%: С 60% - 64%: С-55% - 59%: D+ 50% - 54%: D- 0% -49%: F |
| **Policy of the Discipline** | Appropriating timeframes of homeworks or projects can be prolonged in case of softening circumstances (such, as illness, emergencies, the accident, unforeseen circumstances, etc.) according to the Academic policy of university. Participation of the student in discussions and exercises on employment will be considered in its general assessment for discipline. Constructive questions, dialogue, and a feedback for a question of discipline are welcomed and encouraged during employment, and the teacher at a conclusion of a final assessment will consider participation of each student on employment. |
| **Chart of the discipline** |
| **Week** | **Theme**  | **Hour** | **Point** |
| **1** | **Lecture 1** «Linguistics and its structure. The role of natural language processing. Information. Informational Technologies in Linguistics».  | 1 | 0 |
|  | **Seminar 1**The definition of terms from different dictionaries: Technology, Informational Technology, Innovative Technology, Computational Technology, Hich Technology.  | 1 | 10 |
| **2** | **Lecture 2** «The Emergence of Informational Technologies. Methods and Ways of Using of Informational Technologies. Algorithms»  | 1 | 0 |
|  |  **Seminar 2**The basic features of Informational Technology. Coordination of Information with Communication and Interaction | 1 | 10 |
| **3** | **Lecture 3** «Computational Linguistics as a main part of Linguistics. The theoretical and practical background of Computational Linguistics» | 1 | 0 |
|  | **Seminar3**The evolution of Computational Linguistics in Kazakh Linguistics: K.K. Zhubanov, K.B. Bektayev, A.K. Zhubanov etc. Terms: Programme Language, Informational language, Additional Language. | 1 | 3 |
|  | **IWMT 1,2** The thoughts of scientists about the future of Informational Technology (Presentation). | 2 | 7 |
| **4** | **Lecture 4** «Applied Linguistics. Object, subject and aim. The main directions of Applied Linguistics». | 1 | 0 |
|  | **Seminar 4**Hardware and Software of Information Technologies in Linguistics. Classification of Applied Computer Programms. Particular Programmes for Linguistic aims. | 1 | 3 |
|  | **IWMT 3,4** History of Computational Linguistics. Directions of Computational Linguistics. Tell about one of them (demonstrate by means of tables). | 2 | 7 |
| **5** | **Lecture 5** «Using of Informational Technologies in Linguistics. Automatic synthes and analyse of speech»  | 1 | 0 |
|  | **Seminar 5**The theory of A.N. Baranov about Applied Linguistics. Can we consider Computational Linguistics and Applied Linguistics as synonyms? Prove your answer.  | 1 | 3 |
|  | **IWMT 5** Scientific explores of Y.N. Marchuk about Computational Linguistics, Dictionary of terms: Calculating Linguistics, Engineering Linguistics, Computational Linguistics, Mathematic Linguistics | 2 | 7 |
| **6** | **Lecture 6** «Artificial Languages. International artificial languages. The functions of artificial and natural languages» | 1 | 0 |
|  | **Seminar 6**Sign. Language sign and speech sign. Linguistic Models. | 1 | 3 |
|  | **IWMT 6**Modelling in Statistics. Quantitative Linguistics.  | 2 | 7 |
| **7** | **Lecture 7** «Applied parts of Computational Linguistics. Corpus Linguistics» | 1 | 0 |
|  | **Seminar7**The differences of natural language functions in the system «Human – computer – human». Terms: multumediaof technology, a new informational technology, exchange of calculating resources, on-line technology.  | 1 | 3 |
|  | **IWMT 7** The theory of A.K. Zhubanov about Computational Linguistics  | 2 | 7 |
| **8** | **Lecture 8** «Computational lexicography. Electronic dictionaries» | 1 | 0 |
|  | **Seminar 8**Problems considering creation the Artificial intelligence system  | 1 | 10 |
| **9** | **Lecture 9** «The types of Electronic dictionaries. Peculiarities of Electronic dictionaries» | 1 | 0 |
|  | **Seminar 9**The notion about frequency and probability. Statistics – to take scientific-practical results it is necessary to gather, systematize, working up. Terms: pidgin, creol. | 1 | 10 |
| **10** | **Lecture 10** «Computer terminography. Term – the basic object of terminography. Linguistic information science. To minimize the text – the role of Linguistic information science in working up of the text.  | 1 | 0 |
|  | **Seminar 10**The General theory of lexicography. The peculiarities of curriculum lexicography as a scientific discipline. | 1 | 3 |
|  | **IWMT 8,9** The thoughts of J.I. Shemakin about Computational Linguistics | 2 | 7 |
| **11** | **Lecture 11** «Maсhine translation. The Classification of the Machine Translation system» | 1 | 0 |
|  | **Seminar 11**Informational search.The directions of Informational search: abstract publications, informational search and automatic control. Bibliographical informational systems. | 1 | 3 |
|  | **IWMT 10**Acquaintance with programme *Praat: doing Phonethics by Computer*. Part 1. | 2 | 7 |
| **12** | **Lecture 12 «**Library function. Database, base of knowledge, library-bibliography classification (LBC), descriptor, step (hierarchy) classification, informational-search system (ISS – informational-search system), informational-thesaurus language (informational-thesaurus language – ITL), informational inquiry, informational search, informational abstract, local net, marketing, scientific-technic information, interactive condition, them informational inquiry, formalize, formalization language» | 1 | 0 |
|  | **Seminar 12**The category apparatus of Computational Linguistics. Computational Linguistics in Computer programmes. Terms: basic, aposteriori languages, apriori languages. | 1 | 3 |
|  | **IWMT 11** Work on *Praat: doing Phonethics by Computer*. Part 2. | 2 | 7 |
| **13** | **Lecture 13** «Language teaching by means of Computer. Informational technologies in language teaching. The General principles of Language teaching by means of Computer. The net resources in Language teaching» | 1 | 0 |
|  | **Seminar 13**Computer programs of Linguistic source on Kazakh, Russian and English  | 1 | 3 |
|  | **IWMT 12,13**Work on Praat: doing Phonethics by Computer. Part 3. | 2 | 7 |
| **14** | **Lecture 14** «The background of Computer TV-Communications. Computer nets. Internet sources. The General structure of Internet. The reasons of using of Internet sources» | 1 | 0 |
|  | **Seminar 14**Corpus Linguistics. National Language Corpus. The report about different National Corpus, comparison their differences, observe their future.  | 1 | 3 |
|  | **IWMT 14,15** Work on Praat: doing Phonethics by Computer. Part 4. | 2 | 7 |
| **15** | **Lecture 15**  «Advantages and Limitations of Computer Technologies in humankind» | 1 | 0 |
|  | **Seminar 15**Acquaintance with programmes in computer class. ТІЛ ҚАЗЫНА, РЕСМИ ҚАЗАҚ ТІЛІ, ТІЛАШАР, SPSS, PRAAT, SOLO and etc.: advantages and limitations | 1 | 10 |

Dean of the Faculty O. Abdymanuly

Chairman of the Methodological Council S. Imankulova

Head of the Department D.A. Karagoishiyeva

Lecturer G.S. Sharipova