Federal State Autonomous Educational Institution of Higher Education
PEOPLES' FRIENDSHIP UNIVERSITY OF RUSSIA NAMED AFTER PATRICE LUMUMBA
RUDN University

Law Institute

educational division (faculty/institute/academy) as higher education programme developer

COURSE SYLLABUS

Computer-Assisted and Artificial Intelligence Tools for Legal Translation
course title

Recommended by the Didactic Council for the Education Field of:

45.04.02 Linguistics
field of studies / speciality code and title

The course instruction is implemented within the professional education programme of higher education:

Legal Translation and Interpreting
higher education programme profile/specialisation title

2025

1. COURSE GOALS

The main purpose of the course is to introduce students to a wide range of computer-assisted tools that can be used in legal translation, as well as a number of translation-related IT topics from file management to information research and management. Special emphasis will be placed on terminology management.

The course content is designed to provide students with the basic theoretical knowledge, and practical skills, international and national panorama of the discipline. Special emphasis is laid on interdisciplinary environment that embraces aspects of Linguistics and Information Technology.

Throughout the course students will be trained to use technology to their advantage and will learn what types of technology will serve them best in different circumstances. The course aims to explain the main concepts and general issues associated with the technology. Students will learn fundamental concepts, and tutorials will allow them to get hands-on experience using the specific products that are currently available.

2. REQUIREMENTS FOR LEARNING OUTCOMES

On completion of the Course the student
- **knows** basic computer programmes and tools that can assist in legal translation
- **understands** the role of CAT for optimising the legal translation process
- **understands** the role of corpora for optimising the legal translation process
- **understands** digital potential and limitations for legal translation process;
- **masters** strategies and tactics to use CAT for legal translation;
- **can** search for and apply CAT tools that are relevant for particular projects
- **masters** TRADOS, terminology management and translation memory tools for legal translation
- **masters** computer-based bilingual legal information processing skills;

Table 2.1. List of competences that students acquire through the course study

Competence code	Competence descriptor	Competence formation indicators (within this course)
GPC-7	Can work with the major search engines, expert systems and other knowledge systems as well as systems of verbal information processing	Indicator 1 Knows major search engines, expert systems for knowledge representation and verbal information processing. Indicator 2 Masters comprehensive digital tools for knowledge representation and verbal information processing.
GPC-8	Can use digital technologies and methods in professional activities to study and model objects of professional activities, data analysis, information presentation, etc.	Indicator 1 Knows digital technologies relevant for the translator and interpreter's professional activities Indicator 2 Masters comprehensive digital tools to explore and model objects of professional activities, data analysis, information presentation, etc. within translator and interpreter's professional activities

3.COURSE IN HIGHER EDUCATION PROGRAMME STRUCTURE

The course is taught within the Professional Disciplines university module.

The course is taught in English, the students are expected to master English at level B2- C1 to follow explanations, take notes, and ask questions, as well as provide the answers for overall course activities in English. Students are expected to know Translation Studies key concepts and theories and to have basic computer skills (e.g., word processing).

The course provides a solid foundation for further study in such fields as legal documents translation, scientific translation in jurisprudence, court interpreting, translation and interpreting for public services and legal translation.

4. COURSE WORKLOAD AND ACADEMIC ACTIVITIES

The total workload of the course is ___2__ credits (____72_____ academic hours).

*Table 4.1. Types of academic activities during the periods of higher education programme mastering (**__full-time training__**)*

Type of academic activities	Total academic hours	Semesters/training modules			
		1	**2**	**3**	**4**
Contact academic hours	*18*	*18*			
Lectures (LC)					
Lab work (LW)					
Seminars (workshops/tutorials) (S)	18	18			
Self-studies	*45*	*45*			
Evaluation and assessment (exam/passing/failing grade)	*9*	*9*			
Course workload		**72**	**72**		
		2	**2**		

5. COURSE CONTENTS

Table 5.1. Course contents and academic activities types

1.	CAT Tools for Legal Translation: Introduction	Translation technology. Definitions. The impact of technology on translation. Human-machine interaction. Evaluation of technology. Producing data for empirical investigations. Discussion and analysis of readings. Search for resources. 15 online translation tools recommended by translators https://blog.gengo.com/15-online-translation-tools-translators/
2.	Collecting Data in Electronic Form: Scanning and optical character recognition	Scanning and optical character recognition. Accuracy, advantages and disadvantages. Savings of 83% thanks to CAT tools... SlideShare https://www.slideshare.net/tradas/saving-bigwithcattools Languages and file formats. OCR software. Economic factors.
3.	Collecting Data in Electronic Form: Voice recognition	Voice recognition. Improving the accuracy of voice-recognition technology. Benefits and drawbacks of voice-

		recognition technology. File formats and file conversion. Integration with other tools. Voice recognition software.
4.	Corpora	Electronic corpora. Types of electronic corpora. Creating an electronic corpus.
5.	Corpus-analysis tools: Word-frequency lists. Lemmatized lists. Stop lists	Corpus-analysis tools. Word-frequency lists. Lemmatized lists. Stop lists. Types. Advantages and disadvantages. Corpus-analysis software. What is a CAT tool? | Translation 101 – Trados https://www.sdltrados.com/solutions/cat-tools/translation-101-what-is-a-cat-tool.html
6.	Corpus-Analysis Tools: Concordances	Types of Concordances. Monolingual concordances. Bilingual concordances.
7.	Working with Concordances	Collocations. Annotation and mark-up. Frequency data. Context. Availability and copyright. Pre-processing. Speed and information-retrieval issues. Character sets and language-related difficulties. Economic aspects.
8.	Terminology-Management Systems	Storage. Retrieval. Active terminology recognition and pre-translation. Term extraction. Linguistic and statistical approaches.
9.	Advantages and Disadvantages of TMS	Advantages and disadvantages of TMS. Speed and flexibility. Quality. Sharing information: networking, file formats, and standards. Character sets and language-related difficulties. Economic factors.
10.	Translation-Memory Systems	TM systems. Segmentation. Types of matches. Limitations of existing matching algorithms. CAT tools terminology - What is a Fuzzy match? https://www.proz.com/forum/cat_tools_technical_help/21094-cat_tools_terminology_what_is_a_fuzzy_match.html
11.	Creating a TM	Creating a TM. Interactive translation. Post-translation.
12.	Working with an Existing TM	Working with an existing TM. Texts suitable for use with a TM. Electronic form. File formats, filters, and standards. Character sets and language-related difficulties. Ownership. Integration with other tools.
13.	Real-time Translation on the Internet	AltaVista Translation with Systran. Engineering requirements. Linguistic requirements. User feedback. User reaction. User evaluation. Possibilities and challenges.
14.	Post-editing	Relevance, importance, and characteristics of MT post-editing. Types and levels of MT post-editing. Inbound translation approach. MT with no post-editing (browsing/gisting). Rapid post-editing. Outbound translation approach. Minimal post-editing. Full post-editing.
15.	Post-editing Guidelines and Criteria	Post-editing guidelines and criteria. General Motors and SAE J2450. Pan-American Health Organization (PAHO). European Commission Translation Service (ECTS). Post-Editing Special Interest Group. Semi-automating Post-editing Processing.
16.	New Technologies	New types of translation and technology. Prerequisites for successful development of CAT tools.

6. CLASSROOM EQUIPMENT AND TECHNOLOGY SUPPORT REQUIREMENTS

Table 6.1. Classroom equipment and technology support requirements

Type of academic activities	Classroom equipment	Specialised educational / laboratory equipment, software, and materials for course study (if necessary)
Lecture	A lecture hall for lecture-type classes, equipped with a set of specialised furniture; board (screen) and technical means of multimedia presentations.	No course-specific pre-installed software required due to reliance on cloud computing
Seminar	A classroom for conducting seminars, group and individual consultations, current and mid-term assessment; equipped with a set of specialised furniture and technical means for multimedia presentations.	No course-specific pre-installed software required due to reliance on cloud computing
Self-studies	A classroom for independent work of students (can be used for seminars and consultations), equipped with a set of specialised furniture and computers with access to the electronic information and educational environment.	No course-specific pre-installed software required due to reliance on cloud computing

7. RESOURCES RECOMMENDED FOR COURSE STUDY

Main readings:
1. Kornacki, M. (2018). Computer-assisted Translation (CAT) Tools in the Translator Training Process. Austria: Peter Lang.
2. Legal Translation: Current Issues and Challenges in Research, Methods and Applications. (2019). Germany: Frank & Timme, Verlag für wissenschaftliche Literatur.
3. Moreno, C. (2021). Machine Translation. Analyzing and Classifying Errors and Comparing Performances. Germany: GRIN Verlag.
4. Mitchell-Schuitevoerder, R. (2020). A Project-Based Approach to Translation Technology. United Kingdom: Taylor & Francis.

Additional readings:
1. The Routledge Encyclopedia of Translation Technology. (2020). United Kingdom: Routledge.
2. Pietrzak, P., Kornacki, M. (2020). Using CAT Tools in Freelance Translation: Insights from a Case Study. United States: Taylor & Francis.
3. Youdale, R. (2019). Using Computers in the Translation of Literary Style: Challenges and Opportunities. United States: Taylor & Francis.

Internet sources
1. The European Association for Machine Translation:
www.eamt.org
2. GlobalSight Open-Source TMS:
www.globalsight.com/
3. Terminology search engine:

www.termsearch.info/

4. LexisNexis:
www.lexisnexis.com/en-us/home.page

5. Poedit (cross-platform gettext catalogs (.po files) editor):
www.poedit.net/

6. DéjàVu:
www.atril.com/

7. Open Language Tools:
www.open-language-tools.java.net/

8. Omega T (a free translation memory application written in Java):
www.omegat.org/

9. Lokalize:
www.userbase.kde.org/Lokalize

10. Gtranslator (an enhanced gettext po file editor for the GNOME desktop environment):
www.projects.gnome.org/gtranslator/index.html

11. Pootle (non-profit organisation focused on the localisation, or translation, of Open Source software into South Africa's 11 official languages):
www.translate.org.za/

12. SDL TRADOS (SDL provides market-leading translation software fortranslation memory, terminology management, and software localization):
www.translationzone.com/en/translator-home.asp

13. Virtaal (graphical translation tool):
www.translate.sourceforge.net/wiki/virtaal/index

14. WebTranslateIt (a translation tool to help translate documents and software from a web browser):
www.webtranslateit.com/

15. Wordbee (a web-based translation platform):
www.wordbee.com/

16. Wordfast (the world's №1 provider of platform-independent Translation Memory technology):
www.wordfast.com/

17. Aspell (spell checker):
www.aspell.sourceforge.net/

18. Word counter:
www.catcount.com/

19. AbiWord:
www.abisource.com/

20. Google Scholar:
www.scholar.google.com/

21. WordSmith Tools:
www.lexically.net/wordsmith/

22. TextStat:
www.niederlandistik.fu-berlin.de/textstat/software-en.html

23. AntConc:
www.antlab.sci.waseda.ac.jp/antconc_index.html

24. MultiTerm:
www.trados.com/products.asp?page=22

25. TermStar:
www.star-group.net/eng/home.html
26. Linux for Translators (the most comprehensive site for open source software available on Linux):
www.linuxfortranslators.org/
27. Translation Directory
www.translationdirectory.com
28. What is a CAT tool? - Translation 101 – YouTube
https://www.youtube.com/watch?v=5GhX1XA_vsA
29. An Introduction to Computer Assisted Translation (CAT) Tools – YouTube
https://www.youtube.com/watch?v=wWnfexNYsy
30. What are the core components of a CAT tool? - YouTube
https://www.youtube.com/watch?v=4SwvMDcOG98
31. What is a CAT Tool? – Trados
https://www.sdltrados.com/solutions/cat-tools/

 2.Databases and search engines:
- electronic foundation of legal and normative-technical documentation http://docs.cntd.ru/
- Yandex search engine https:// www .yandex.ru/
- Google search engine https://www.google.ru/
- Scopus abstract database http://www.elsevierscience.ru/products/scopus/

Training toolkit for self- studies to master the course:
1. The set of lectures on the course

8. ASSESSMENT TOOLKIT AND GRADING SYSTEM* FOR EVALUATION OF STUDENTS' COMPETENCES LEVEL UPON COURSE COMPLETION

The assessment toolkit and the grading system to evaluate the competences formation level (competences in part) upon the course study completion are specified in the Appendix to the course syllabus.

DEVELOPERS:

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