Siberian Federal University

Foreign Language

Course Guide

This course contributes to the requirements for the Degree of Candidate of Science in Computer Science.

Krasnoyarsk, 2020.

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1. Course Description

This course contributes to the requirements for the Degree of Candidate of Scince in Computer Science.

Title of the Academic Program	Post-grasuate Programs in English "Mathematical and software support for computers, complexes and computer networks"
Type of the course	core /mandatory
Course period	2 semesters First semester: from October, the 1st to February, the 1st (14 weeks) Second semester: from February, the 1st to June, the 1st (14 weeks)
Study credits	6 ECTS credits
Duration	216 hours
Language of instruction	English
Academic requirements	− Master's Degree in Computer Science or equivalent (transcript of records), − good command of English (certificate or other official document) **Prerequisites:** − **Advanced knowledge** of math**,** digital electronics, programming skills.

1.1 Course overview

«Foreign Language» is the course specifically tailored towards the professional and scientific environment. It is based on utilizing additional resources provided in order to tackle professional language, better equipping students for scientific activity. These resources contribute to promoting practical skills and knowledge, including translation of scientific papers and various types of texts containing professional terms. The course was developed for nonnative speakers of English. It covers Grammar review, reading comprehension, Writing Scientific Papers and Conferencing. It offers advice on using verbs optimally, provides general rules for text mechanics. It helps to understand scientific texts, select and organize a paper's content, draft it more effectively, and revise it efficiently. The students will be able also to select and organize the content of an oral presentation, create effective slides to support it, deliver the presentation effectively, and answer questions usefully. The course also offers tips on how to deliver a presentation as a non-native speaker of English.

1.2 Special features

The course is based on engaging monographs and real scientific articles from scholarly journals in economics. The extra content also includes engaging translation systems (Smartcat), on-line terminological dictionaries, glossaries.

Students develop productive skills through individual, group/pair work.

1.3 Course aims and objectives

Course Aim

The course aims to help students communicate more effectively as scientists, specifically in the English language.

Course Objectives

One of the skills required for modern scientists is having a good command of English. The economic study has come into prominence which English is used as the primary means of communication in correspondences, conferences, and in the process of writing scientific articles. The objectives of this course are to introduce students to problem solving, critical thinking and professional communication through integrated skills. The emphasis is on how to

use formal vocabulary and expressions in professional and scientific environments both orally and in written form.

1.4 Learning outcomes

The «Foreign Language» course comprises 104 class hours of instruction. Upon completion of the course, students will be able to:

- understand and interpret information presented in verbal, numerical or graphical form either written or oral in English;
- organize and present ideas and statements in a clear, logical and appropriate form.
- prepare a scientific paper in English for publication in a scientific journal;

- use the SmartCAT application, online glossaries and specialized online dictionaries and translation systems to quickly generate quality translation.

2. Course Lecturer, Contact Information

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3. Prerequisites

B2 level of English is sufficient for the course. Worldwide recognized certificates confirming the knowledge of the English language are accepted. If a candidate has additional confirmation that English was the language of instruction in the previous university, he/she may be asked to take a Skype interview to confirm English skills.

4. Course Outline

Week	Practice session / Assignments	Hours Lec/Lab/HA
Semester 1		
1-4	Grammar review	-/36/16
5-10	Reading comprehension	-/36/16
11-14	Writing Scientific Papers	-/36/16
Semester 2		
1-8	Conferencing	-/36/5
9-12	Reading comprehension	-/44/5
13-14	My research work	-/8/6
	116	216
36	Итоговый экзамен	36

4.1 Course requirements

4.1.1 Web-page of the course

Course materials and required reading materials are available on the webpage of the **Foreign Language**, SibFU E-learning portal, www.e.sfu-kras.ru. You must be logged in to access this course. https://e.sfu-kras.ru/course/view.php?id=23212

4.1.2 Required reading

1. Hewings, M. Advanced Grammar in Use: A self study reference and practice book for advanced learners of English. 2013, 350 p.
2. Tamzen, A. Cambridge English for Scientists Cambridge University Press, 2011, 108 p.
3. Web page of the course/*module* https://e.sfu-kras.ru/course/view.php?id=23212
4. Course materials (lecture and seminar notes, homework) for classroom activities and sessions)

Course materials can be found in the e-course. The university scientific library and the Internet resources are used for independent studying of theoretical material on

subjects and sections of the course. Presentations can be created with free Powerpoint templates.

4.1.3 Course materials

The main recourse that will guide a student through the course is ***Web page of the course/module***. It contains all of topics of this course according to the schedule. It will provide you with useful links at the end of each chapter that will help graduate students to improve their understanding of the topics.

Course materials can be found in the e-course. The university scientific library and the Internet resources are used for independent studying of theoretical material on subjects and sections of the course. Presentations can be created with free Powerpoint templates.

4.1.4 Required feedbacks

• Informal Feedback enables students to understand what they need to know or be able to do in the midst of learning, so they can adjust their learning activities to reach the assignments goal (e.g. comments provided on a draft of a paper being written).

• Formal Feedback discloses how well students have mastered the intended learning outcome of an assignment and may disclose gaps in students' understanding.

4.2 Course Structure

Learning Activities	Hours
Lectures	-
Practice sessions / Seminars,	116
Self-study Assignments	64
Final Exam (including preparation)	36
Total study hours	**216**

4.3 Time schedule of the course and course outline

№	Theme	Week	Learning Activities	Hours LA/HA	Home Assignment and Reading
			Semester 1		
1	Grammar review	1-4	Tenses; Passive and Active Voice; Non verbal forms and constructions; Conditionals	36 /16	Course tests. Hewings, M. Advanced Grammar in Use: A self study reference and practice book for advanced learners of English. 2013, 350 p.
2	Reading comprehension	5-10	Scientific texts; Structure; Working with dictionaries; Types of dictionaries; Translation systems (Smartcat); Terms Glossary; Annotating and summarizing	36/16	Reading scientific papers or monographs authored by native speakers of English, published not long than 5 years ago (200 000 characters including spaces); Working with dictionaries; Annotating and summarizing; Making a Glossary of Terms.

№	Theme	Week	Learning Activities	Hours LA/HA	Home Assignment and Reading
3	Writing Scientific Papers	11-14	Understanding academia Before writing: delimiting your scientific paper. Writing the paper: things you need to know After the writing: the check list	36/16	MOOC https://ru.coursera.org/learn/how-to-write-a-scientific-paper
			Semester 2		
4	Conferencing	1-8	Giving Poster Presentations (Creating, Presenting, Promoting); Chairing Sessions (Introducing the session, Introducing the speakers, Managing time, Managing questions and answers, Wrapping up the session); Panel Discussions (Preparing for the panel, Participating in the discussion, Moderating the discussion).	36/5	Tamzen, A. Cambridge English for Scientists Cambridge University Press, 2011, 108 p. https://www.nature.com/scitable/ebooks/english-communication-for-scientists-14053993/contents/ Making Presentations Describing visual information like graphs or maps.
5	Reading comprehension	9-12	Scientific texts Annotating and summarizing. Translation Glossary	44/5	Reading scientific papers or monographs authored by native speakers of English, published not long than 5 years ago (425 000 characters including spaces); Working with dictionaries; Processing large amounts of text in a short time; Making a Glossary of Terms.
6	My research work	13-14	Presenting yourself Presenting your scientific research	8/6	Prepare short presentation of your research work

№	Theme	Week	Learning Activities	Hours LA/HA	Home Assignment and Reading
7			Final exam	36	Prepare to final exam. Preparation for answering exam questions (available at e-courses). Preparation for solving control problems using the e-course.

5.Assessment

Coursework assessments involve:

Individual oral presentations

- Individual Reading Assignment (625 000 characters)
- Oral interactions
- Written tasks of various length (tests, the first draft of science paper, translation, vocabulary list)
- Listening/ viewing.

There is an exam element with this course. It includes written annotation of scientific paper (15000 characters) and oral exam including reading (2000 characters), annotating (2000 characters) and speaking (thesis). The following grades can be awarded: Excellent/ good / satisfactory/ failed.

Excellent	Good	Satisfactory	Failed
Excellent understanding of text(s) under discussion. Nearly flawless grammar, and word choice; Sentences are clear. Excessive wordiness is avoided where appropriate. Explanation is accurate and fair. Most important views of others are represented. Views of others are correctly	Good understanding of texts. Good Grammar and word choice. Sentences are generally clear with good transitions. Some wordiness in paper, but generally good. good expla nation	Some misrepresentations of texts. Mostly competent understating of texts under discussion. Some problems with grammar and word choice. Problems with sentence clarity, transitions. Wordiness and some inattention to word choice. Explanation displays noteworthy	Fails to address texts/authors/views under discussion. Serious problems with grammar. Explanation displays many significant inaccuracies or unfairness. Many lapses in how views of others are quoted, paraphrased, and cited.

quoted, paraphrased, and well - integrated Student shows excellent understanding of content under discussion.	s that are mostly accurate and fair. Views of others are usually correctly quoted, Paraphrased& cited.	inaccuracies or unfairness. Some lapses in how views of others are quoted, paraphrased, and cited.	Little or no explanation given, or if given, contains serious misrepresentatio ns and/or many lapses in how views of others are quoted, paraphrased, and cited.

6. Attendance Policy

Participation: attendance, punctuality, active involvement in discussions, completion of reading and writing assignments and preparation of presentation are absolutely essential for passing this course.

7. Required Course Participation

There are no special requirements for the course participation. The preferred type of report submission is the electronic one. Students can use the web-version of the course (link) for a better progress. All problems for solution could be found there together with text from the course book.

8. Facilities, Equipment and Software
Facilities:

Facilities of the Institute, located within the campus include a library, in which visitors can find all the study materials they need, computer labs and office space to address research problems. Printers are available in computer labs and in certain department locations.

Our computer labs offer statistical software and Microsoft Office which are accessible during a day time. Students, faculty, and staff can access and save files in the cloud from anywhere.

Annex 1 Example of Course Test Questions

1. What's the purpose of your present study?
2. What are the aims and tasks of your science?
3. Are there any difficulties in your research work?
4. Is there any solution to your problem?
5. Do you sometimes try new methods?
6. Do you often deal with complicated problems?
7. Do you discuss your results with your supervisor?
8. Are your results published?
9. Is your problem studied anywhere else?
10. Are additional investigations required to solve this problem?
11. Are outstanding results often reported in literature?
12. Whose works are best known in your field of research?
13. What problems were considered most pressing?
14. Whose works laid the foundation for your field?
15. Whose ideas had a profound influence on the development of your field?
16. What contribution will you make by your research to that particular branch of science?
17. How many sections will your thesis have?
18. Have you written any scientific papers?
19. Have you ever attended international conferences?
20. Have you made any discovery in science yet?
21. Has your supervisor been helpful in your research?
22. Has your supervisor seen your recent results yet?
23. What new studies have been undertaken by you recently?
24. What research is being carried out by you now?
25. What preliminary conclusions can be drawn from your work?
26. What results are to be expected from your work?
27. How long might it take you to complete the work?
28. What improvements should be introduced in the research process?
29. What should be done to encourage further research in your field?
30. What is necessary to broaden and deepen one's knowledge of the subject?
31. Why should scientists exchange views and information?
32. What questions will you discuss with your foreign colleagues when you see them?
33. When do you expect conclusive results?
34. Can science do without theories and hypotheses?
35. What are the necessary components of scientific research?
36. What would you do to acquire deeper and broader knowledge in your field?

37. What would you do to get comprehensive knowledge in adjacent areas?
38. What would you suggest for improving the state of research in your field?
39. What would you suggest for upgrading research in your area?
40. Could you give a review of current literature on your subject?
41. What qualities should a researcher possess today and why?
42. Is collaboration important in research and how is it realized?

(List one. The title)

"SIBERIAN FEDERAL UNIVERSITY"
Institute of Space and Information Technologies
Department of Computer Science
Master's Degree Programs "Digital intelligent control systems"
Group No *(Group identifier)*

REPORT ON LABORATORY WORK No. *(Number of HA)*
Theme: *(Theme of task).*

Tutor: *(Tutor's / Lecture's Name and Surname).*

Student: *(Student`s Name and Surname).*

Krasnoyarsk, 2020

(List two, etc. The progress)

Main aim: **_(Describe the aim of HA)._**
The task: **_(Describe the task of HA)._**
Solution: **_(short description (no more than 2-3 pages) of the problem solving process)._**

Annex A Diagram(s)

(diagrams and graphs).

Annex 3 Final Oral Exam

Final (candidate) exam (spring semester)

Requirements and assessment of types of speech activities

In the exam, the graduate student must demonstrate the ability to use English as a means of professional communication in the scientific field.

A postgraduate student must know the spelling, orthoepic, lexical and grammatical norms of the studied language and use them correctly in all types of speech communication, in the scientific field in the form of oral and written communication.

Speaking

At the exam, the graduate student must demonstrate mastery of a prepared monologue speech, as well as an unprepared monologue and dialogical speech in a situation of official communication within the program requirements.

The content, adequate realization of communicative intention, consistency, coherence, semantic and structural completeness, normativity of the statement are assessed.

Reading

The graduate student must demonstrate the ability to read original literature in the specialty, relying on the studied language material, background regional and professional knowledge, skills of language and contextual guessing.

The skills of the student, as well as search and browsing reading are assessed. In the first case, the ability is assessed as accurately and adequately as possible to extract the basic information contained in the text, to generalize and analyze the main provisions of the presented scientific text for subsequent translation into the language of instruction, as well as to compile a resume in a foreign language.

Written translation of a scientific text in a specialty is assessed taking into account the general adequacy of the translation, that is, the absence of semantic distortions, compliance with the norm and usage of the target language, including the use of terms.

The summary (main idea) of the read text is assessed taking into account the volume and correctness of the extracted information, the adequacy of the implementation of the communicative intention, meaningfulness, consistency, semantic and structural completeness, the normality of the text.

During search and viewing reading, the ability to determine the range of issues considered in the text and identify the main provisions of the author is assessed within a short time.

The volume and correctness of the extracted information is assessed.

Exam structure

The foreign language exam is carried out in two stages:

At the first stage, a postgraduate student performs a written translation of a scientific text in his specialty in the language of instruction (monograph or a set of articles) in the amount of 15,000 characters. The written translation is accompanied by a dictionary of special terms, including up to 300 words.

Successful completion of translation is a prerequisite for admission to the second stage of the exam. The quality of the translation is assessed using a credit system.

The second stage of the exam is conducted orally and includes three tasks: 1. Learning reading and translation of the original text in the specialty (with a dictionary). The volume is 2500 characters. The work time is 60 minutes.

2. Fluent (viewing) reading and translation of the original text in the specialty. Volume - 1200 characters. Execution time - 3 - 5 minutes. Verification form - transfer of the extracted information in a foreign language (humanitarian specialties) and in the language of instruction (natural science specialties) (at the request of the applicant - in English).

3. Conversation with examiners in a foreign language on issues related to the specialty and scientific work of the graduate student. Volume: 20-25 sentences.

The total volume of literature for the full course on all types of work, taking into account the time criteria for various purposes, should be approximately 625,000 prints. characters (i.e. 250 pages of text).