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

Agrarian -Technological Institute
educational division (faculty/institute/academy) as higher education programme developer

COURSE SYLLABUS

Fundamentals of Scientific Communication
course title

Recommended by the Didactic Council for the Education Field of:

35.04.04 Agronomy
field of studies / speciality code and title

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

Integrated Plant Protection
higher education programme profile/specialisation title

2025

1. COURSE GOAL(s)

The purpose of mastering the discipline "Fundamentals of Scientific Communication" is to prepare the student for independent research activities, master the methodology and methods of analyzing scientific research, improve the methods of public speaking, writing essays, reports, scientific articles, conference theses, course and final qualification works.

2. REQUIREMENTS FOR LEARNING OUTCOMES

Mastering the discipline "Fundamentals of Scientific Communication" is aimed at the formation of the following competencies (part of the competencies) among students:

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

Competence code	Competence descriptor	Competence formation indicators (within this course)
GK-4	Able to apply modern communication technologies in the official language of the Russian Federation and a foreign language(s) for academic and professional interaction	GK-4.2. Presents the results of academic and professional activities at various scientific events, including international ones;
		GK-4.3. Demonstrates integrative skills necessary for effective participation in academic and professional discussions;
PK-5	Capable of preparing scientific and technical reports, reviews, and scientific publications based on the results of completed research	PK-5.3. Able to correctly arrange the results of research in articles, textbooks and monographs

3.COURSE IN HIGHER EDUCATION PROGRAMME STRUCTURE

Mastering the discipline "Fundamentals of Scientific Communication" is aimed at forming the following competencies (part of the competencies) among students:

Table 3.1. The list of the higher education programme components/disciplines that contribute to the achievement of the expected learning outcomes as the course study results

Competence code	Competence descriptor	Previous courses/modules*	Subsequent courses/modules*
GK-4	Able to apply modern communication technologies in the official language of the Russian Federation and a foreign language(s) for academic and professional interaction		Russian as a Foreign Language; Russian Language; Undergraduate practice / Преддипломная практика;
PK-5	Able to prepare scientific and technical reports, reviews and scientific publications		Scientific research work / Научно-исследовательская работа; Research Practice;

Competence code	Competence descriptor	Previous courses/modules*	Subsequent courses/modules*
	based on the results of the research performed		Undergraduate practice / Преддипломная практика: Mathematical Modeling and Design;

* To be filled in according to the competence matrix of the higher education programme.

4. COURSE WORKLOAD AND ACADEMIC ACTIVITIES

Possible wording

The total labor intensity of the discipline "Fundamentals of Scientific Communication" is 3 credits for full-time education.

Table 4.1 – Types of educational work by periods of mastering the OP HE for full-time education

Type of academic activities		Total academic hours	Semesters/training modules			
			1	2	3	4
Contact academic hours		*34*	*34*			
including:						
Lectures (LC)						
Lab work (LW)						
Seminars (workshops/tutorials) (S)		*34*	*34*			
Self-studies		*59*	*59*			
Evaluation and assessment (exam/passing/failing grade)		*15*	*15*			
Course workload	academic hours_	**108**	**108**			
	credits	**3**	**3**			

5. COURSE CONTENTS

Table 5.1. Course contents and academic activities types

Course module title	Course module contents (topics)	Academic activities types
Module 1: Fundamentals of scientific communication	Topic 1.1. Collection and preservation of scientific information. Work in professional specialized and general scientific libraries. Working with electronic resources.	S
Module 2: The structure of the final work. Diploma (graduation) work as a qualification study	Topic 2.1. Rules for the design of the manuscript. The title page. Table of contents. Introduction.	S
	Topic 2.2. Literature review. Bibliographic list of references.	S
	Topic 2.3. Conditions, materials (objects) and methods of research. Chapters of the main (experimental) part. Conclusion (discussion of the results). Conclusions. Application.	S
Module 3: Report	Topic 3.1. General characteristics. The sequence of execution. Defining the topic .	S

Course module title	Course module contents (topics)	Academic activities types
	Topic 3.2 The preparatory stage. Work on the text of the abstract.	S
	Topic 3.3 The final stage. Preparation of the report. Preparation for the defense and protection of the abstract.	S
Module 4: Master's thesis	Topic 4.1. General characteristics. The sequence of execution. Definition of the topic and the supervisor.	S
	Topic 4.2. The preparatory stage. Work on the literary review of the thesis (graduation work).	S
	Topic 4.3. Methods of identification and diagnosis of genetically modified plants. International legislative practice of GMO control	S
Module 5. Scientific publications	Topic 5.1. Concepts, functions, basic types.	S
	Topic 5.2. Abstracts of the scientific report /communication	S
	Topic 5.3. General characteristics of the report. The structure of the report.	S
Module 6. Presentation and defense of master's works	Topic 6.1. The formulation of the relevance, purpose, objectives, scientific novelty of the work. Preparation of a public report	S
	Topic 6.2. Presentation, design of research results, illustrative and tabular material. Public protection	S

* - to be filled in only for **full** -time training: *LC - lectures; LW - lab work; S - seminars.*

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)
Seminary	An auditorium for seminar-type classes, group and individual consultations, ongoing monitoring and intermediate certification, equipped with a set of specialized furniture and multimedia presentation equipment.	
Self-studies	A classroom for independent work of students (can be used for seminars and consultations),	

Type of academic activities	Classroom equipment	Specialised educational / laboratory equipment, software, and materials for course study (if necessary)
	equipped with a set of specialised furniture and computers with access to the electronic information and educational environment.	

* The premises for students' self-studies are subject to **MANDATORY** mention

7. RESOURCES RECOMMENDED FOR COURSE STUDY

Main readings:

1. Scientific Communication Publisher-Taylor & Francis Publisher website-http://www.taylorandfrancis.com/Publication date and place-2018 Imprint-Routledge Series-Routledge Studies in Technical Communication, Rhetoric, and Culture, Classification-Semantics, discourse analysis, etc Communication studies-Creative writing & creative writing guides Pages-332

2. Methodology of scientific research : a textbook for universities / N. A. Slesarenko, E. N. Borkhunova, S. M. Borunova [et al.] ; edited by N. A. Slesarenko. — 5th ed., erased. — St. Petersburg : Lan, 2021. — 268 p. — ISBN 978-5-8114-7204-8. — Text : electronic // Lan : electronic library system. — URL: https://e.lanbook.com/book/156383

Additional readings:

1. Methodology of scientific research : a textbook for universities / N. A. Slesarenko, E. N. Borkhunova, S. M. Borunova [et al.] ; edited by N. A. Slesarenko. — 5th ed., erased. — St. Petersburg : Lan, 2021. — 268 p. — ISBN 978-5-8114-7204-8. — Text : electronic // Lan : electronic library system. — URL: https://e.lanbook.com/book/156383

2. Torikov, V. E. Introduction to agronomy : a textbook for universities / V. E. Torikov, O. V. Melnikova ; edited by V. E. Torikov. — Saint Petersburg : Lan, 2024. — 200 p. — ISBN 978-5-507-49420-0. — Text : electronic // Lan : electronic library system. — URL: https://e.lanbook.com/book/417611

Internet sources

1. Electronic libraries (EL) of RUDN University and other institutions, to which university students have access on the basis of concluded agreements:

- RUDN Electronic Library System (RUDN ELS) http://lib.rudn.ru/MegaPro/Web
- EL "University Library Online" http://www.biblioclub.ru
- EL "Yurayt" http://www.biblio-online.ru
- EL "Student Consultant" www.studentlibrary.ru
- EL "Lan" http://e.lanbook.com/

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 *:*

The set of lectures on the course «Fundamentals of Scientific Communication»

* The training toolkit for self- studies to master the course is placed on the course page in the university telecommunication training and information system under the set procedure.

DEVELOPERS:

position, department	name and surname
position, department	name and surname
position, department	name and surname

HEAD OF EDUCATIONAL DEPARTMENT:

name of department	name and surname

HEAD
OF HIGHER EDUCATION PROGRAMME:

position, department	name and surname