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## **Open Food Innovation University (OFINU)**

### **DESCRIPTION OF STUDY MODULE “ACADEMIC WRITING”**

**2024**

# Summary

The study course is elaborated within the project "Open Food Innovation University" (OFINU), being in implementation with support of the European Union Erasmus+ Programme.

**Overall objective** of the project - to modernise food innovation and technology related higher education in Uzbekistan and Tajikistan, thereby increasing the quality and ensuring relevance of the higher education to the needs of the socio-economic growth of the countries concerned and especially of their regions.

**Full partners:**

- Lead partner: Latvia University of Life Sciences and Technologies
- Uzbekistan: Samarkand Agro-innovations and Research University, Andijan Institute of Agriculture and Agro-technologies
- Tajikistan: Technological University of Tajikistan, Kulob Institute of Technology and Innovation Management, Isfara Branch of the Technological University of Tajikistan
- Slovakia: Slovak University of Agriculture in Nitra

**Associated partners in Uzbekistan:**

- A group of companies "AGROMIR"
- "Navigul" MCHJ QK
- "Samarkand don mahsulotlari" JC (Samarkand grain products)

**Associated partners in Tajikistan:**

- CJSC "Combinati Shiri Dushanbe"
- LTD "Orion Rustam"
- Association of Entrepreneurs of Khatlon

**The project implementation period:** 01/02/2024 - 31/01/2027.

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# Introduction

**Study module “Academic Writing”** has been developed for researcher training. For many researchers, writing is the hardest skill to learn. This study module explores the definition of academic writing, examines its key components in-depth, and offers tips for improving academic writing. Writing that disseminates concepts, data, and research to a broader academic audience is known as academic writing. Academic writing can be classified into two categories: expert academic writing, tailored for publication in scholarly journals or books, and student academic writing, integral to academic assessment in universities and schools as a precursor to higher education. The same criteria apply to both student and expert academic writing, which can be challenging for students to learn.

**The aim and objectives** of the study subject are to acquaint students with the principles of academic writing, manuscript preparation according to the requirements of various publishers, manuscript submission and communication with scientific editors and reviewers, and the basics of the presentation.

## Learning outcomes

- Knowledge about the principles of academic writing, the structure of a scientific article, and the most common mistakes.
- Skills in selecting a suitable journal for publishing an article, choosing and critically analysing literature for the introduction, correctly describing materials and methods, preparing the results and discussion part supported by statistical data treatment and concluding, editing the manuscript, and preparing a presentation.
- Competence to prepare a manuscript for submission to a specific scientific journal, communicate with the scientific editor and reviewers, and present research results.

## Study Plan for module “Academic Writing”

Themes	Number of hours			
	Total	Lectures	Practical works	Independent work of the student
1. Introduction to article types and publishing	7	3	2	2
2. The structure of a scientific article (IMRaD)	14	2	4	8
3. Selection and critical analysis of articles	11	2	3	6
4. Elements of academic language	18	2	4	12
5. Visual elements for statistically based data presentation in manuscript	36	4	12	20
6. Preparing, editing, and submitting manuscripts	35	3	4	28
7. Presenting scientific results	12	2	4	6
<b>TOTAL</b>	<b>135</b>	<b>18</b>	<b>35</b>	<b>82</b>

## Study plan for module “Academic Writing” in Uzbekistan

Themes	Number of hours			
	Total	Lectures	Practical works	Independent work of the student
1. Introduction to article types and publishing	10	2	2	6
2. The structure of a scientific article (IMRaD)	16	2	6	8
3. Selection and critical analysis of articles	14	2	4	8
4. Elements of academic language	20	4	6	10
5. Visual elements for statistically based data presentation in manuscript	38	4	12	22
6. Preparing, editing, and submitting manuscripts	38	4	12	22
7. Presenting scientific results	14	2	4	8
<b>TOTAL</b>	<b>150</b>	<b>20</b>	<b>46</b>	<b>84</b>

## Study plan for module “Academic Writing” in Tajikistan

Themes	Number of hours			
	Total	Lectures	Practical works	Independent work of the student
1. Introduction to article types and publishing	8	2	2	4
2. The structure of a scientific article (IMRaD)	16	4	4	8
3. Selection and critical analysis of articles	12	3	3	6
4. Elements of academic language	20	5	5	10
5. Visual elements for statistically based data presentation in manuscript	32	8	8	16
6. Preparing, editing, and submitting manuscripts	40	10	10	20
7. Presenting scientific results	16	4	4	8
<b>TOTAL</b>	<b>144</b>	<b>36</b>	<b>36</b>	<b>72</b>

## Thematic Study Plan for module “Academic Writing”

Date, Time	Study form	Theme	Lecturer
<b>1. Introduction to article types and publishing</b>			
1 <sup>st</sup> day	Lectures (3 h)	Types of scientific articles. Citation and impact factors. Criteria and tools for journal selection. Thematic area of the journal. Publication costs, funding sources. Instructions for authors. Copyright and its transfer. Article authorship and sequence of authors. Scientific ethics and acknowledgments.	Professor R. Galoburda
	Practical work (2 h)	Choice of journal for manuscript submission. Searchable journal databases available.	Professor R. Galoburda
<b>2. The structure of a scientific article (IMRaD)</b>			
2 <sup>nd</sup> day	Lectures (2 h)	Writing process. The structure of a scientific article (IMRaD). Use of other authors' works. Automatic reference management tools.	Professor R. Galoburda
	Practical work (4 h)	Analysis of scientific articles. Automatic reference management tools.	Professor R. Galoburda
<b>3. Selection and critical analysis of articles</b>			
3 <sup>rd</sup> day	Lectures (2 h)	Working with databases. Critical analysis of articles.	Professor R. Galoburda
	Practical work (3 h)	Preparation of background information for scientific article, making library with possible references. Presentation of the selected journals.	Professor R. Galoburda
<b>4. Elements of academic language</b>			
4 <sup>th</sup> day	Lectures (2 h)	The key elements of academic writing. Word choice. English terms and phrases commonly used in academic writing. Paragraph unity and coherence. The most common errors in cases where the language of the manuscript is not the native language of the author.	Professor R. Galoburda
	Practical work / seminar (4 h)	The use of different terms in English. Error recognition. Presentation of the manuscript outline.	Professor R. Galoburda
<b>5. Visual elements for data presentation in manuscript</b>			
5 <sup>th</sup> day 6 <sup>th</sup> day	Lectures (4 h)	Preparation and design of visual material	Professor Z. Krūma
	Practical works (12 h)	Analysis of possible visual elements from literature. Drafting and preparation of visual elements.	Professor Z. Krūma
<b>6. Preparing, editing, and submitting manuscripts</b>			
7 <sup>th</sup> day	Lectures (3 h)	Preparing, editing, and submitting manuscripts. Editing the manuscript before submission. Language editing. Communication with editors and reviewers. Communication	Professor M. Kačániová

Date, Time	Study form	Theme	Lecturer
		with scientific editor and reviewers. Preparation of the article, CREDiT, back matter, selection of possible reviewers, and cover letter. Second cover letter. Responses to reviewers. Revision, and resubmission of manuscript. Language editing, language improvement services. Proofreading approval.	
	Practical work (4 h)	Formatting manuscripts according to the publisher's requirements. Preparation of cover letter. Responding to the reviewer. Reviewing manuscripts submitted by other students.	Professor M. Kačániová
<b>7. Presenting scientific results</b>			
8 <sup>th</sup> day	Lectures (2 h)	Poster presentation. Oral presentation.	Professor M. Kačániová
	Practical works (4 h)	Poster preparation based on the manuscript. Preparation of oral presentation based on the manuscript. Presentations.	Professor M. Kačániová

## **Themes and their summary in the study module “Academic Writing”**

### **Theme 1. Introduction to article types and publishing**

#### **Issues to be covered in the lectures**

1. Why do researchers publish?
2. Pre-requisites for scientific paper.
3. Article types. Original research article. Review. Short communication.
4. Citation index. H-index. SNIP etc. metrics.
5. Scope and aim of journals.
6. Subscription journals. Embargo period. Open Access.
7. Predatory journals.
8. References. Copyright.
9. Ethics regarding human and animal research.
10. Conflict of interests.
11. Funding. Acknowledgment.

#### **Issues to be covered in the practical work**

1. Journal selection for manuscript submission.
2. Use of the available searchable journal databases.

#### **Topics for independent work**

1. Write an abstract on your topic and search for three possible journals where you could publish your research. Explain, why you have selected these journals.
2. If you do not have material to publish, use the abstract provided by the teacher.
3. Select five scientific articles on your topic and save them for further reading.

#### **Literature and databases on the theme**

1. Elsevier Ethics in Research & Publication. Available at: [ethics.elsevier.com](http://ethics.elsevier.com)
2. Sciedirect.com
3. Scopus.com
4. For more information on Research metrics and publishing please visit Monash University library at <https://guides.lib.monash.edu/research-metrics-publishing/home>
5. Rele, S., Kennedy, M., Blas, M. (2017). Journal Evaluation Tool. LMU Librarian Publications & Presentations. 40. [https://digitalcommons.lmu.edu/librarian\\_pubs/40](https://digitalcommons.lmu.edu/librarian_pubs/40)

#### **Useful reading for teachers**

1. For journal ranking see Scopus, Web of Science or Scimago Journal and Country Rank <https://www.scimagojr.com/>.
2. Beall's list of potential predatory journals and publishers. Available at: <https://beallslist.net/>
3. Get your manuscript ready for journal editors. Available at: <https://beta.springernature.com/pre-submission/what-editors-look-for?journalId=13197>
4. Monavarian, M. (2021). Basics of scientific and technical writing. MRS BULLETIN, vol. vol. 46. Available at: <https://link.springer.com/article/10.1557/s43577-021-00070-y>
5. Author tutorials. Available at: <https://www.springernature.com/gp/authors/campaigns/writing-in-English>

6. Zaumanis, M. (2021). Write an impactful research paper: A scientific writing technique that will shape your academic career. Peer recognized series Book no. 1. 2021. (<https://peerrecognized.com>)
7. Journal suggesters
   
<https://journalfinder.elsevier.com/>
  
<https://journalsuggester.springer.com/>
  
<https://journalfinder.wiley.com/search?type=match>
  
<https://authorservices.taylorandfrancis.com/publishing-your-research/choosing-a-journal/journal-suggester/>
  
<https://www.mdpi.com/about/journalselector>
  
<https://researcher.life/>

## **Theme 2. The structure of a scientific article (IMRaD)**

### **Issues to be covered in the lectures**

1. Anatomy of the scientific article.
2. Authorship. CREDiT roles.
3. Permission to use figures, tables, long texts etc.
4. Plagiarism and Cross Ref. Paraphrasing /revision of sentences (<https://englishreadingwriting.blogspot.com/p/paraphrasing.html#.Y9PM5HZBy00>)
5. EndNote, Mendeley, Zotero etc.

### **Issues to be covered in the practical work**

1. Analysis of scientific articles.
2. Use of automatic reference management tools (upload selected articles into the reference management system and do citations).

### **Topics for independent work**

1. Highlight or underline the aim, and write down what tasks are completed to achieve the aim (use one of the articles selected in the previous theme).
2. Add more articles to the reference manager, and check the correctness of entries (correct, if necessary).

### **Literature and databases on the theme**

1. A Practical Guide to Academic Writing for International Students A ROUTLEDGEFREEBOOK. Taylor & Francis. Retrieved June 16, 2024 from [https://www.routledge.com/rsc/downloads/A\\_Practical\\_Guide\\_to\\_Academic\\_Writing\\_for\\_International\\_Students-A\\_Routledge\\_FreeBook-\\_FINAL\\_VERSION.pdf](https://www.routledge.com/rsc/downloads/A_Practical_Guide_to_Academic_Writing_for_International_Students-A_Routledge_FreeBook-_FINAL_VERSION.pdf)
2. EndNote: Help Guides, Getting Started Guides and Manuals. [https://support.clarivate.com/Endnote/s/article/EndNote-Help-Guides-Getting-Started-Guides-and-Manuals?language=en\\_US](https://support.clarivate.com/Endnote/s/article/EndNote-Help-Guides-Getting-Started-Guides-and-Manuals?language=en_US)
3. Guides. Explore Mendeley. Available at: <https://www.mendeley.com/guides>
4. Meo, S.A. (2018). Anatomy and physiology of a scientific paper. *Saudi Journal of Biological Sciences*, 25, 1278-1283. doi: 10.1016/j.sjbs.2018.01.004.
5. Moeller, K., Baxter, J. (2014). Anatomy of an Article. Arizona State University School of Life Sciences. Ask A Biologist. <https://askabiologist.asu.edu/explore/anatomy-of-an-article>
6. Zotero: Documentation. Available at: <https://www.zotero.org/support/>

## Useful reading for teachers

1. Allen, L., O'Connell, A., Kiermer, V. (2019). How can we ensure visibility and diversity in research contributions? How the Contributor Role Taxonomy (CRediT) is helping the shift from authorship to contributorship. *Learned Publishing*. 32, 1-100. <https://onlinelibrary.wiley.com/doi/epdf/10.1002/leap.1210>
2. CHEM: Intro to Scientific Literature. (2023). Anatomy of a scientific article. Accessed on June 13, 2024. Available at: <https://library.citadel.edu/c.php?g=615326&p=4280193>
3. Cook, D. A. (2016). Twelve tips for getting your manuscript published, *Medical Teacher*, 38(1), 41-50, DOI: 10.3109/0142159X.2015.1074989
4. CRediT author statement. Elsevier Accessed on June 13, 2024. Available at: <https://www.elsevier.com/authors/policies-and-guidelines/credit-author-statement>
5. Hartley, J. (2008). Academic Writing and Publishing: A practical handbook. London, New York, Routledge, Taylor & Francis. <https://doi.org/10.4324/9780203927984>
6. Huffman, S., Cotos, E., Becker, K. (2023). Exploring the Anatomy of a Research Article / Preparing to publish. Iowa State University. Digital Press. Accessed on June 13, 2024. Available at: <https://iastate.pressbooks.pub/preparingtopublish/chapter/exploring-the-anatomy-of-a-research-article/>
7. Human Nutrition: Reading Scientific Articles. Windward Community College. A part of University of Hawaii system. Accessed on June 13, 2024. Available at: <https://library.wcc.hawaii.edu/nutrition/reading>
8. Important points to consider when critically evaluating published research papers. The Open University, OpenLearn. Accessed on June 13, 2024. Available at: <https://www.open.edu/openlearn/mod/oucontent/view.php?id=64126&section=1>
9. Pun, M. (2021). Plagiarism in Scientific Writing: Why It Is Important to Know and Avoid. *Journal of Political Science*, 21, 109-118. [10.3126/jps.v21i0.35269](https://doi.org/10.3126/jps.v21i0.35269)
10. See Research Paper Outline with Key Sentence Skeleton described by M.Zaumanis. Available at: <https://peerrecognized.com/research-paper-outline-with-key-sentence-skeleton-paper-template/>
11. Strange, K. (2008). Authorship: why not just toss a coin? *American Journal of Physiology-Cell Physiology* Volume 295, Issue 3. <https://doi.org/10.1152/ajpcell.00208.2008>

## Policies and Guidelines by various publishers

- Elsevier  
Policies & guidelines. Available at: <https://beta.elsevier.com/researcher/author/policies-and-guidelines>
- CRediT author statement. Available at: <https://www.elsevier.com/authors/policies-and-guidelines/credit-author-statement>
- John Wiley & Sons  
Author Guidelines. Available at: <https://onlinelibrary.wiley.com/page/journal/10970037/homepage/forauthors.html# 4. EDITORIAL POLICIES>
- Sage  
Sage Editorial Policies. Available at: <https://us.sagepub.com/en-us/nam/publishing-policies>
- Springer  
Authorship Principles. Available at: <https://www.springer.com/us/editorial-policies/authorship-principles>
- Taylor and Francis  
Taylor and Francis Editorial Policies. Available at: <https://authorservices.taylorandfrancis.com/editorial-policies/>

## **Theme 3. Selection and critical analysis of articles**

### **Issues to be covered in the lectures**

1. Working with databases.
2. Critical analysis of articles.

### **Issues to be covered in the practical work**

1. Application of Scopus Artificial Intelligence (AI) or other AI tools for the first overview of the topic.
2. The presentation of five relevant articles.

### **Topics for independent work**

1. Active reading - read the selected articles - highlight useful phrases for future writing.
2. Start drafting manuscript on your topic. Prepare outline of the results and discussion part (what you would include - data, tables, figures, etc. - make section headings).

### **Literature and databases on the theme**

1. Academic Writing Guide. Torrens University, Australia. Accessed on June 13, 2024. Available at: [https://library.torrens.edu.au/academicskills/apa/writing\\_guide](https://library.torrens.edu.au/academicskills/apa/writing_guide)
2. Sheehy, M., Wray, C., Fay, F., Laoghaire, D., Lynch, M., Neylon, J., O'Donnell, T., O'Donovan, C., Quinlan, C. (2019). Academic Writing Handbook for Learners. In the further education and training (FET) sector. Accessed on June 13, 2024. Available at: <https://www.fess.ie/images/stories/ResourcesForTutors/AcademicWritingHandbookForLearnersInTheFETSector.pdf>

### **Useful reading for teachers**

1. Hartley, J. (2008). Academic Writing and Publishing: A practical handbook. London, New York, Routledge, Taylor & Francis. <https://doi.org/10.4324/9780203927984>
2. Full OWL Resources for Grades 7-12 Students and Instructors. (2024) The On-Campus Writing Lab & The OWL at Purdue and Purdue University. Accessed on June 13, 2024. Available at: [https://owl.purdue.edu/owl/resources/writing\\_instructors/grades\\_7\\_12\\_instructors\\_and\\_students/index.html](https://owl.purdue.edu/owl/resources/writing_instructors/grades_7_12_instructors_and_students/index.html)

## **Theme 4. Elements of academic language**

### **Issues to be covered in the lectures**

1. Paragraph unity and coherence.
2. Active vs passive voice, subject and verb agreement, verb tense.
3. Articles.
4. Spaces in the text.
5. Prepositions.
6. Capitalization.
7. Signposting, hedging words.
8. Punctuation.
9. Measurement units.

10. British vs American spelling.
11. Words with similar sounds but different meanings.

#### **Issues to be covered in the practical work**

1. Adding words to glossary and phrase book (for example, 5 verbs in each group to replace verbs to look at, to compare, to show, to find out), extracting useful phrases for describing various issues).
2. Tasks on paragraph unity (find and cross out the sentences, break paragraph unity; arrange sentences and make coherent paragraphs).
3. Language editing (MS Word, Grammarly, real person, artificial intelligence).

#### **Topics for independent work**

1. Write a first draft of the manuscript

#### **Literature and databases on the theme**

1. Oshima, A., Hogue, A. (2007). Introduction to Academic Writing. Wait Plains: Pearson Education, Longman. Available at: [https://edisciplinas.usp.br/pluginfile.php/3928474/mod\\_resource/content/1/Introduction%20to%20Academic%20Writing.pdf](https://edisciplinas.usp.br/pluginfile.php/3928474/mod_resource/content/1/Introduction%20to%20Academic%20Writing.pdf)
2. Reporting Verbs. Explore different ways of referring to literature and foregrounding your voice. Academic Skills Kit. Newcastle University. Accessed on June 13, 2024. Available at: <https://www.ncl.ac.uk/academic-skills-kit/writing/academic-writing/reporting-verbs>
3. Signposting. Explore different ways of guiding the reader through your assignment. Academic Skills Kit. Newcastle University. Accessed on June 13, 2024. Available at: <https://www.ncl.ac.uk/academic-skills-kit/writing/academic-writing/signposting>
4. The key elements of writing. Accessed on June 13, 2024. Available at: <https://pdfweb.truni.sk/e-ucebnice/eap/data/48a425aa-ce1c-4f6e-a68b-37b05785b0d8.html?ownapi=1>
5. Zemach, D.E., Rumisek, L. A. (2005). Academic writing from paragraph to essay. Oxford; Macmillan Publishers Limited.

#### **Useful reading for teachers**

1. Academic style. Explore the key features that make up academic style. The University of Melbourne. Accessed on June 13, 2024. Available at: <https://students.unimelb.edu.au/academic-skills/resources/developing-an-academic-writing-style/key-features-of-academic-style>
2. Active Versus Passive Voice. The On-Campus Writing Lab & The OWL at Purdue and Purdue University. Accessed on June 13, 2024. Available at: [https://owl.purdue.edu/owl/general\\_writing/academic\\_writing/active\\_and\\_passive\\_voice/active\\_versus\\_passive\\_voice.html](https://owl.purdue.edu/owl/general_writing/academic_writing/active_and_passive_voice/active_versus_passive_voice.html)
3. Drew, C. (2023). *28 Cohesion Examples*. Helpful Professor. Accessed on June 13, 2024. Available at: <https://helpfulprofessor.com/cohesion-examples/>
4. Language Used in Academic Writing. StudySmarter. Accessed on June 13, 2024. Available at: <https://www.studysmarter.co.uk/explanations/english/5-paragraph-essay/language-used-in-academic-writing/>
5. Paragraph Structure. Rochester Institute of Technology. Accessed on June 13, 2024. Available at: <https://www.rit.edu/ntid/sea/processes/paragraph/process/body>

6. Paragraph unity and coherence. (2009) Wheaton College Writing Center. Accessed on June 13, 2024. Available at: <https://www.wheaton.edu/academics/services/writing-center/writing-resources/paragraph-unity-coherence-and-development/>
7. Paragraph Unity and Coherence. American University, Academic Support Center, Writing Lab, updated 2009 Accessed on June 13, 2024. Available at: <https://www.american.edu/provost/academic-access/upload/paragraph-unity-and-coherence.pdf>
8. Paragraph Unity. Accessed on June 13, 2024. Available at: <https://iuuk.mff.cuni.cz/~andrew/EAP/KaneCh13.pdf>
9. Paragraphs. University College, University of Toronto. Accessed on June 13, 2024. Available at: <https://www.uc.utoronto.ca/paragraphs>
10. Sheffield, N. (2011). The Next Level. Duke Graduate School Scientific Writing Resource. Accessed on June 13, 2024. Available at: <https://sites.duke.edu/scientificwriting/the-next-level/>
11. The 4 things (that examiners love...) Part 2: Coherence and Cohesion. ILTS University. Accessed on June 13, 2024. Available at: <https://www.ieltsuniversity.com/4-things-examiners-love-coherence-cohesion/>
12. Transitions. Wheaton College. Accessed on June 13, 2024. Available at: <https://www.wheaton.edu/academics/services/writing-center/writing-resources/transitions/>
13. Using keywords to write your title and abstract. Taylor and Francis Author Services. Accessed on June 13, 2024. Available at: <https://authorservices.taylorandfrancis.com/publishing-your-research/writing-your-paper/using-keywords-to-write-title-and-abstract/>
14. Wallwork, A. (2013). English for Research: Usage, Style, and Grammar. New York: Springer Science+Business Media. (available also at: [https://www.infomed.hlg.sld.cu/lecturas\\_avanzadas/English\\_for\\_Research\\_Usage\\_Style\\_and\\_Grammar.pdf](https://www.infomed.hlg.sld.cu/lecturas_avanzadas/English_for_Research_Usage_Style_and_Grammar.pdf))
15. Weber, R., Stolley, K. (2018). Transitional Devices. *Purdue University Online Writing Lab (OWL)*, 2 owl.english.purdue.edu/owl/resource/574/02/.
16. What Is Hedging in Academic Writing? (2023) Enago Academy. Accessed on June 13, 2024. Available at: <https://www.enago.com/academy/hedging-in-academic-writing>

#### Links to YouTube videos on paragraph unity, coherence and cohesiveness

- Writing better. Available at: <https://www.youtube.com/watch?v=vbMtBioBaIQ>
- Writing better: Sentences, paragraphs and essays. Available at: <https://www.youtube.com/watch?v=Ubj1gPvwKU>
- Writing better: How to write an Introduction Paragraph with Thesis Statement. Available at: <https://www.youtube.com/watch?v=XSmVvkRKCdw>
- Writing better: How to Write Body Paragraphs for an Essay. Available at: <https://www.youtube.com/watch?v=hi9-acR3AgY>
- Unity in Academic Writing. Available at: <https://www.youtube.com/watch?v=HT1FkC0XZ8w>

## **Theme 5. Visual elements for data presentation in manuscript**

### **Issues to be covered in the lectures**

1. The aim of visual elements.
2. Types of visual elements (bar charts, histograms, box plots, scatter plots, heatmaps etc.).
3. Tables, figures formatting.
4. Basic statistics used for visual elements for article (descriptive and concluding statistics).
5. Common flaws in data presentation.

### **Issues to be covered in the practical work**

1. Basics of statistical analysis for data presentation.
2. Preparation and formatting of tables.
3. Preparation and formatting of graphs. Graph components.
4. Figures.
5. Introduction to statistical data presentation with visual elements.

### **Topics of independent work**

1. Descriptive statistics as a tool for data presentation in article. Calculation of parameters based on own data or dataset provided by teacher.
2. Analyses of visual elements found in scientific articles based on concluding statistics methods.
3. Selection and preparation of the appropriate visual elements for article using formatting guidelines (own data or dataset provided by teacher)

### **Literature and databases on the theme**

1. King, L. (2018). Preparing better graphs. *Journal of the Public Health and Emergency*; 2:1. doi: 10.21037/jphe.2017.12.03
2. Figure Preparation. Wiley Author Services. Accessed on June 13, 2024. Available at: <https://authorservices.wiley.com/author-resources/Journal-Authors/Prepare/manuscript-preparation-guidelines.html/figure-preparation.html>
3. Instructions to Authors. Accessed on June 13, 2024. Available at: [https://sciendo-parsed-data-feed.s3.eu-central-1.amazonaws.com/PLUA/Instructions\\_to\\_Authors.pdf](https://sciendo-parsed-data-feed.s3.eu-central-1.amazonaws.com/PLUA/Instructions_to_Authors.pdf)

### **Useful reading for teachers**

1. Elsevier. Guide for authors: Your Paper Your Way. Accessed on June 13, 2024. Available at: <https://www.elsevier.com/subject/next/guide-for-authors>
2. Manuscript preparation. Springer Nature. Accessed on June 13, 2024. Available at: <https://www.springer.com/gp/authors-editors/book-authors-editors/your-publication-journey/manuscript-preparation>

## **Theme 6. Preparing, editing, and submitting manuscripts**

### **Issues to be covered in the lectures**

1. Writing tools for collaboration (Google docs, MS Word online).
2. Instructions to authors, templates.
3. Electronic submission systems (editorial management systems). Elsevier, MDPI, Wiley, Springer, Thomson Reuters, De Gruyter etc.
4. Examples of cover letters.
5. Selection of possible reviewers.
6. Tools for language improvement.
7. Review process.
8. The questions addressed by reviewers.

### **Issues to be covered in the practical works**

1. Formatting the manuscript according to the publisher's requirements.
2. Preparing the cover letter.

### **Topics of independent work**

1. Reviewing manuscripts submitted by other students.
2. Responding to the reviewer.

### **Literature and data bases on the theme**

1. A Practical Guide to Academic Writing for International Students A ROUTLEDGEFREEBOOK. Taylor & Francis. Accessed on June 13, 2024. Available at: [https://www.routledge.com/rsc/downloads/A\\_Practical\\_Guide\\_to\\_Academic\\_Writing\\_for\\_International\\_Students-A\\_Routledge\\_FreeBook-\\_FINAL\\_VERSION\\_.pdf](https://www.routledge.com/rsc/downloads/A_Practical_Guide_to_Academic_Writing_for_International_Students-A_Routledge_FreeBook-_FINAL_VERSION_.pdf)
2. Academic Writing Guide. Future Academic Support. UCEN, Manchester. Accessed on June 13, 2024. Available at: [https://www.ucenmanchester.ac.uk/media/filer\\_public/c9/2f/c92fdc28-a5da-4098-917f-49c1f76940bf/ucen-academic-writing-booklet.pdf](https://www.ucenmanchester.ac.uk/media/filer_public/c9/2f/c92fdc28-a5da-4098-917f-49c1f76940bf/ucen-academic-writing-booklet.pdf)
3. Academic Writing Guide. Torrens University, Australia. Accessed on June 13, 2024. Available at: [https://library.torrens.edu.au/academicskills/apa/writing\\_guide](https://library.torrens.edu.au/academicskills/apa/writing_guide)
4. Academic Writing Guide. University of Sussex. Sussex Centre for Language Studies. Accessed on June 13, 2024. Available at: <http://www.sussex.ac.uk/languages/files/awg/>
5. Academic Writing Handbook – Guidance for students. London School of Hygiene & Tropical Medicine. (2020) Accessed on June 13, 2024. Available at: <https://www.lshtm.ac.uk/sites/default/files/academicwritinghandbook.pdf>
6. Academic Writing Handbook for Learners. In the further education and training (FET) sector (2019). Sheehy M., Wray C., Fay F., Laoghaire D., Lynch M., Neylon J., O'Donnell T., O'Donovan C., Quinlan C. Accessed on June 13, 2024. Available at: <https://www.fess.ie/images/stories/ResourcesForTutors/AcademicWritingHandbookForLearnersInTheFETSector.pdf>
7. Academic writing: a Practical Guide. University of York. Accessed on June 13, 2024. Available at: <https://subjectguides.york.ac.uk/academic-writing>

8. Bak, N. (2003). Guide to Academic Writing. University of the Western Cape. Accessed on June 13, 2024. Available at: [https://www.researchgate.net/publication/236229397\\_Guide\\_to\\_Academic\\_Writing](https://www.researchgate.net/publication/236229397_Guide_to_Academic_Writing).
9. Guide for authors. Elsevier. Accessed on June 13, 2024. Available at: <https://www.elsevier.com/subject/next/guide-for-authors>
10. Guide to Academic Writing ENGLISH AND AMERICAN STUDIES [November 2019] Bayreuth University, Germany. Accessed on June 13, 2024. Available at: [https://www.amerikanistik.uni-bayreuth.de/pool/dokumente/Guide-to-Academic-Writing\\_2019-11-07.pdf](https://www.amerikanistik.uni-bayreuth.de/pool/dokumente/Guide-to-Academic-Writing_2019-11-07.pdf)
11. Instructions for Authors. MDPI. Accessed on June 13, 2024. Available at: <https://www.mdpi.com/journal/resources/instructions>
12. Moh, H. (2018). Basic Academic Writing. STKIP PGRI Bangkalan. Accessed on June 13, 2024. Available at: <https://stkipgri-bkl.ac.id/wp-content/uploads/2019/11/Basic-Academic-Writing.pdf>
13. Quick guide to academic writing. University of Cumbria, UK. Accessed on June 13, 2024. Available at: <https://my.cumbria.ac.uk/media/MyCumbria/Documents/Library/Quick-guide-to-Academic-writing.pdf>
14. Whitaker, A. (2009). Academic Writing Guide. A Step-by-Step Guide to Writing Academic Papers. CityUniversity of Seattle. Bratislava, Slovakia. Accessed on June 13, 2024. Available at: <https://www.vsm.sk/Curriculum/academicsupport/academicwritingguide.pdf>
15. Writing for research. Elsevier Researcher Academy. Accessed on June 13, 2024. Available at: <https://researcheracademy.elsevier.com/writing-research>

## **Theme 7. Presenting scientific results**

### **Issues to be covered in the lectures**

1. Poster presentation.
2. Oral presentation.

### **Issues to be covered in the practical works**

1. Poster preparation based on the manuscript.
2. Preparation of oral presentation based on the manuscript.
3. Presentations.

### **Topics of independent work**

1. Preparation of poster on the topic, covered in the manuscript.
2. Preparation of oral presentation on the topic, covered in the manuscript.

### **Literature and data bases on the theme**

1. Academic Presentations and Posters: Recommendations and Resources. The Graduate School, University of North Carolina. Accessed on June 13, 2024. Available at: <https://gradschool.unc.edu/academics/resources/postertips.html>
2. How to Make Good Figures for Scientific Papers. Simplified Science Publishing. Accessed on June 13, 2024. Available at: <https://www.simplifiedsciencepublishing.com/resources/how-to-make-good-figures-for-scientific-papers>

3. Schoeberl, M., Toon, B. Ten Secrets to Giving a Good Scientific Talk. Accessed on June 13, 2024. Available at:  
[https://web.archive.org/web/20151026082537/http://www.cgd.ucar.edu/cms/agu/scientific\\_talk.html](https://web.archive.org/web/20151026082537/http://www.cgd.ucar.edu/cms/agu/scientific_talk.html)

### Useful reading for teachers

1. 18 tips for giving a horrible presentation. Retraction Watch. Accessed on June 13, 2024. Available at: <https://retractionwatch.com/2016/11/30/18-tips-giving-horrible-presentation/>
2. Better Posters. Accessed on June 13, 2024. Available at: <https://betterposters.blogspot.com/2011/04/critique-breast-cancer-inhibition.html>
3. IvyPanda. Tips for Giving Clear Talks. Accessed on June 13, 2024. Available at: <https://ivypanda.com/blog/tips-for-giving-clear-talks/>
4. Sodano, L., Di Dio, A. (2010). Scientific papers' presentations: methods and useful suggestions. Conference: Training project "English readings: scientific papers' presentations and discussion" Accessed on June 13, 2024. Available at: [https://www.researchgate.net/publication/268745598\\_Scientific\\_papers'\\_presentations\\_methods\\_and\\_useful\\_suggestions](https://www.researchgate.net/publication/268745598_Scientific_papers'_presentations_methods_and_useful_suggestions)
5. Williams, J. B. W. (2009). How to Give a Sensational Scientific Talk. Accessed on June 13, 2024. Available at: [https://web.archive.org/web/20150918164351/http://chem.virginia.edu/wp-content/uploads/2009/05/talk\\_in\\_pdf.pdf](https://web.archive.org/web/20150918164351/http://chem.virginia.edu/wp-content/uploads/2009/05/talk_in_pdf.pdf)

## Literature sources

1. A Practical Guide to Academic Writing for International Students A ROUTLEDGEFREEBOOK. Taylor & Francis. Accessed on June 13, 2024. Available at: [https://www.routledge.com/rsc/downloads/A\\_Practical\\_Guide\\_to\\_Academic\\_Writing\\_for\\_International\\_Students-A\\_Routledge\\_FreeBook-\\_FINAL\\_VERSION\\_.pdf](https://www.routledge.com/rsc/downloads/A_Practical_Guide_to_Academic_Writing_for_International_Students-A_Routledge_FreeBook-_FINAL_VERSION_.pdf)
2. Academic Writing Guide. Future Academic Support. UCEN, Manchester. Accessed on June 13, 2024. Available at: [https://www.ucenmanchester.ac.uk/media/filer\\_public/c9/2f/c92fdc28-a5da-4098-917f-49c1f76940bf/ucen-academic-writing-booklet.pdf](https://www.ucenmanchester.ac.uk/media/filer_public/c9/2f/c92fdc28-a5da-4098-917f-49c1f76940bf/ucen-academic-writing-booklet.pdf)
3. Academic Writing Guide. Torrens University, Australia. Accessed on June 13, 2024. Available at: [https://library.torrens.edu.au/academicskills/apa/writing\\_guide](https://library.torrens.edu.au/academicskills/apa/writing_guide)
4. Academic Writing Guide. University of Sussex. Sussex Centre for Language Studies. Accessed on June 13, 2024. Available at: <http://www.sussex.ac.uk/languages/files/awg/>
5. Academic Writing Handbook – Guidance for students. London School of Hygiene & Tropical Medicine. (2020) Accessed on June 13, 2024. Available at: <https://www.lshtm.ac.uk/sites/default/files/academicwritinghandbook.pdf>
6. Academic Writing Handbook for Learners. In the further education and training (FET) sector (2019) Sheehy M., Wray C., Fay F., Laoghaire D., Lynch M., Neylon J., O'Donnell T., O'Donovan C., Quinlan C. Accessed on June 13, 2024. Available at: <https://www.fess.ie/images/stories/ResourcesForTutors/AcademicWritingHandbookForLearnersInTheFETSector.pdf>
7. Academic writing: a Practical Guide. University of York. Accessed on June 13, 2024. Available at: <https://subjectguides.york.ac.uk/academic-writing>
8. Bak, N. (2003). Guide to Academic Writing. University of the Western Cape. Accessed on June 13, 2024. Available at: [https://www.researchgate.net/publication/236229397\\_Guide\\_to\\_Academic\\_Writing](https://www.researchgate.net/publication/236229397_Guide_to_Academic_Writing).
9. Guide for authors. Elsevier. Accessed on June 13, 2024. Available at: <https://www.elsevier.com/subject/next/guide-for-authors>
10. Guide to Academic Writing ENGLISH AND AMERICAN STUDIES [November 2019] Bayreuth University, Germany. Accessed on June 13, 2024. Available at: [https://www.amerikanistik.uni-bayreuth.de/pool/dokumente/Guide-to-Academic-Writing\\_2019-11-07.pdf](https://www.amerikanistik.uni-bayreuth.de/pool/dokumente/Guide-to-Academic-Writing_2019-11-07.pdf)
11. Instructions for Authors. MDPI. Accessed on June 13, 2024. Available at: <https://www.mdpi.com/journal/resources/instructions>
12. Moh, H. (2018). Basic Academic Writing. STKIP PGRI Bangkalan. Accessed on June 13, 2024. Available at: <https://stkippgri-bkl.ac.id/wp-content/uploads/2019/11/Basic-Academic-Writing.pdf>
13. Quick guide to academic writing. University of Cumbria, UK. Accessed on June 13, 2024. Available at: <https://my.cumbria.ac.uk/media/MyCumbria/Documents/Library/Quick-guide-to-Academic-writing.pdf>
14. Whitaker, A. (2009). Academic Writing Guide. A Step-by-Step Guide to Writing Academic Papers. CityUniversity of Seattle. Bratislava, Slovakia. Accessed on June 13, 2024. Available at: <https://www.vsm.sk/Curriculum/academicsupport/academicwritingguide.pdf>
15. Writing for research. Elsevier Researcher Academy. Accessed on June 13, 2024. Available at: <https://researcheracademy.elsevier.com/writing-research>

### **Additional literature at AIAA**

#### **Literature on conducting field experiments and analyzing the obtained results**

1. Dospexov B.A. Field experiment methodology. 1987. (in Russian)
2. Methods of agrochemical, agrophysical and microbiological research in irrigated cotton areas. (in Russian)
3. Mirzajonov Q., Xasanova F. And others. Methods of field experiments. Tashkent, 2007. (in Uzbek)

#### **Literature on methods of research:**

1. Determination of volume mass of soil by N.A. Kachinsky method
4. Determination of water permeability of the soil by the methods of S.I. Dolgov and S.N. Rizhov
5. Humus in the soil (by the Tyurin method), gross nitrogen, total phosphorus (by the Malseva, Gritsenko method), nutrients in mobile form in the soil, nitrate nitrogen (colorimetric, by the Granwald-Lyaju method), mobile phosphorus (by the Machigin method), exchangeable potassium (by the Protasov method )
6. Mathematical statistical analysis Microsoft Excel computer program
7. Soil granularity, aggregate composition according by the method of N.I. Savvinov

### **Additional literature at BTUTI**

1. АСОСХОИ ТАДИҚОТИ ИЛМӢ: Даствури таълимӣ/ Муаллифон:Ҳакимов F.Қ., Яминзода З.А. Душанбе-2020, 196 саń. (FUNDAMENTALS OF SCIENTIFIC RESEARCH: Educational manual/ Authors: Hakimov G.K., Yaminzoda Z.A. Dushanbe-2020, 196 pages.)
2. Лудченко А.А., Лудченко Я.А., Примак Т.А. Основы научных исследований: Учеб. пособие / Подред. А.А. Лудченко. — 2-е изд., стер. — К.: О- во "Знания", КОО, 2001. — 113 с. (Ludchenko A.A., Ludchenko Ya.A., Primak T.A. Fundamentals of scientific research: Textbook. allowance / Ed. A.A. Ludchenko. — 2nd ed., erased. - K.: Society "Knowledge", KOO, 2001. - 113 p.)

## **Materials required for the implementation of the study course program**

<b>Nr.</b>	<b>Material resources and equipment</b>	<b>Quantity / description</b>
1.	Internet access	
2.	Access to databases	Necessary for scientific literature search.
3.	Moodle based e-study environment	Used for practical task assignments and communication between students and teachers.

## **Methods used for the implementation of the study course program**

<b>No.</b>	<b>Types</b>	<b>Possible methods to be used</b>
1.	Lectures	Presentation of theoretical material by the teacher in front of the audience. Lectures include a theoretical background of academic writing.
2.	Practical works	Use of visual and interactive materials: Presentations, video tutorials, interactive websites. Drafting manuscript following practical guidance of teacher.
3.	Seminars	Presenting prepared poster and oral presentation. Discuss with classmates and teacher.
4.	Independent work	Assignments for independent studies are described with each topic.