<Program>

Advanced Course - How to Write a Scientific Paper

Instructor : Robert C. Meurant, PhD.

Advanced Course Part 1

I. Basic Scientific Writing Structure

Lecture 1:
Scientific Communication and Paragraph Structure I

A. SCITABLE: English Communication for Scientists

B. Ashford University Writing Centre:
Good Paragraph Development -
As Easy as P.I.E.

C. Hamilton College:
Nesbitt-Johnston Writing Center:
Paragraph Structure

D. Paragraph Structure I

Exercise 1 a

E. Purdue University Online Writing Lab:
On Paragraphs

F. BBC Bitesize KS3:
Writing: Structure & Paragraphs

G. Paragraph Structure II

Exercise 1 b

H. University of Carolina at Chapel Hill:
The Writing Centre: Paragraphs

I. Paragraph Structure III

Exercise 1 c

Advanced Course Part 1

I. Basic Scientific Writing Structure

Lecture 2:
Syntax and Sentence Structure

A. Frankfurt International School:
Syntax - English sentence structure

B. Sentence Structure I

Exercise 2 a

C. University of Ottawa:
HyperGrammar:
Building Sentences

D. Sentence Structure II

Exercise 2 b

E. British Council:
Learn English:
Clause, phrase and sentence

F. Sentence Structure III

Exercise 2 c

Advanced Course Part 1

I. Basic Scientific Writing Structure

Lecture 3:
Scientific Writing and Word Choice

A. Scientific Writing

1. Notes on good scientific writing in general
2. Robert C. Meurant:
   A verbal spatial morphology and mobile app
   for English as a Foreign Language
3. University of Surrey:
   Characteristics of good scientific writing

B. Good Academic Writing and Word Choice

1. Academic Coaching & Writing™:
   Good Academic Writing:|
   What is good academic writing?
2. Word Choice - A

   Exercise 3 a: Word Choice A
3. Word Choice - B

   Exercise 3 b: Word Choice B
4. Word Choice - C

   Exercise 3 c: Word Choice C

C. Writing Essays and Submitting Papers for Editing

1. Purdue University OWL:
   Essay writing
2. Robert C. Meurant:
   How to submit papers for editing

Advanced Course Part 2

I. Basic Scientific Writing Structure

Lecture 4:
Common ESL Mistakes in Research Writing

A. Scribendi:
The 10 Most Common ESL Mistakes

1. Painting the Picture
2. Passive voice
3. Noun-to-verb changes

Exercise 4 a

B. Pearson:
The Brief Penguin Handbook:
Common ESL Errors

1. The Article Problem
2. Using weak verbs
3. Changing verb tense
4. Starting with “It” or “There”

Exercise 4 b

C. English Club:
Six Common Mistakes in ESL Writing… and how to avoid them

1. Redundancy
2. Using imprecise words
3. Miscellaneous Problems
4. Review

Exercise 4 c

Advanced Course Part 2

II. How to Write a Scientific Paper

Lecture 5:
Purpose, Ethics, and Overview;
How to Write the Title and the Abstract;
and How to Cite the References

A. Purpose, Ethics and Overview
   1. JEPS: The Origin and Purpose of Scientific Publications
   2. The Purpose of a Scientific Paper
   3. Ethical Considerations
   4. General Overview

Exercise 5 a

B. How to Write the Title and the Abstract
   1. CSU: Writing the Scientific Paper
   2. How to write the Title
   3. How to write the Abstract

Exercise 5 b

C. How to Cite the References
   1. American Scientist: The Science of Scientific Writing
   2. How to cite References in the body text

Exercises 5 c & d

Advanced Course Part 2

II. How to Write a Scientific Paper

Lecture 6:
How to Write the Introduction,
How to Write the Materials & Methods,
and How to Write the Results

A. How to Write the Introduction

1. The Structure, Format, Content, and Style of a Journal-Style Scientific Paper: Why a Scientific Format?
2. A Strategy for Writing Up Research Results: An Overview
3. Writing the Introduction
4. Persuasive writing: Get started with the Introductory Paragraph

Exercises 6 a & b

B. How to Write the Materials and Methods

1. How to write a paper in scientific journal style and format: The Materials and Methods
2. 12 Steps to Writing an Effective Materials and Methods
3. How to Write the Methods Section of a Research Paper
4. Writing the Materials and Methods

Exercise 6 c

C. How to Write the Results

1. How to write a paper in scientific journal style & format: The Results
2. 12 Steps to Writing an Effective Results Section
3. Writing a Results Section
4. Writing Up the Results

Exercise 6 d

Advanced Course Part 3

II. How to Write a Scientific Paper

Lecture 7:
How to Write the Discussion,
How to Prepare the Literature Review, and
How to Present the Tables, Graphs and Figures

A. How to Write the Discussion

1. University of Wisconsin-Madison: The Writing Center:
   The Writer's Handbook: Discussion Section
2. Yale Journal of Biology and Medicine: E. D. Kallestinova:
   How to Write Your First Research Paper: Discussion of the Results
3. SF Edit: 14 Steps to Writing an Effective Discussion Section
4. Explorable: Martyn Shuttleworth: Writing a Discussion Section
5. Writing the Discussion

Exercises 7 a and b

B1. How to Prepare the Literature Review

1. University of California Santa Cruz: University Library: Write a Literature Review
2. Queensland University of Technology: QUT Write: Writing a literature review
3. Monash University: Language and Learning Online: Writing: Writing literature reviews
4. RMIT University: Learning Lab: Online Tutorial: Literature review

B2. 5. University of Minnesota Duluth: Helen Mongan-Rallis:
Guidelines for writing a literature review

Exercise 7 c

C. How to Present the Tables, Graphs and Figures

1. SF Edit: 12 Steps to Developing Effective Tables and Figures
2. Purdue University OWL: APA Tables & Figures
3. Editage: How to use figures and tables effectively
   to present your research findings:
   Helping you get published
4. Robert C. Meurant: Advice on the Illustrations

Advanced Course Part 3

II. How to Write a Scientific Paper

Lecture 8:
How to Write the Conclusion, State the Acknowledgments, Present the Reference List, and Prepare the Appendices

A. How to Write the Conclusion

1. Purdue University: Online Writing Lab: Conclusions
2. San Francisco Edit: Twelve Steps to Writing an Effective Conclusion
3. Colby College: A Guide to Writing Scientific Papers
4. SCITABLE: English Communication for Scientists
5. University of Toronto: Writing: Introductions and Conclusions
6. Explorable Psychology Experiments: Writing a Conclusion

Exercises 8 a and b

B. How to State the Acknowledgments

1. UCSA: Writing a Scientific Paper: Acknowledgments
2. Bate's College: The Structure, Format, Content, and Style of a Journal-Style Scientific Paper: Acknowledgments
3. Explorable Psychology Experiments: Writing Acknowledgements
4. University of Illinois: Acknowledgements in Scientific Publications and Presentations
5. Universitat Autònoma de Barcelona: Writing Scientific Papers: Acknowledgements
6. KOONEC: How to Write the Acknowledgments, Funding and Disclosures of a Scientific Paper
7. FemaleScienceProfessor: The Authors Gratefully Acknowledge

Exercise 8 c

C. How to Present the Reference List - A

1. UEfAP: Academic writing: Writing a list of references
2. NTNU: VIKO: Writing a reference list in the Harvard style
3. Monash University: Writing: Reference List

How to Present the Reference List - B

4. Purdue University Online Writing Lab: Reference List:
   - i. Basic Rules
   - ii. Authors
   - iii. Articles in Periodicals
   - iv. Books
   - v. Other Print Sources
   - vi. Electronic Sources (Web Pubs)
   - vii. Other Non-Print Sources

Exercises 8 d and e

D. How to prepare the Appendices

1. Walden: How to Format and Cite an Appendix in APA Style
2. Purdue University OWL: Appendices: When appendices might be necessary
3. Synonym: How to Make an Appendix in an APA Paper
4. Nova Southeastern University: Q&A for Appendices