

BIOCEP-622: SCIENTIFIC WRITING**(3 ECTS, 4 MC)**

Course Description and Syllabus

Basic Information

Type of Course	Lecture with practical exercises
Term	2 nd semester
Expected no. of participants	< 20
Language	English
Hours per week in term	4 hr/week for lecture 2 hr/week for practical

Instructors

Prof Aye Aye Myint	Coordinator
Dr. Naw Zarchi Linn	
Dr. Aye Khet Soe	

COURSE OBJECTIVE

The course aims at providing students with basic knowledge in scientific writing and contributing to effective writing skills. It encourages them to clarify ideas through the writing process and evaluate others writing to aid the preparation of manuscripts for publication. In addition, the course aims to develop student's awareness of the underlying structure and patterns of scientific research articles and to improve proficiency in communicating in English.

Objectives:

- to provide students with effective scientific writing and communication skills
- to help students gain greater insight into the issues and challenges of science writing in a variety of contexts

LEARNING OUTCOMES

Students will be able to:

1. Understand the principles of scientific writing
2. Practice scientific writing skills
3. Understand common features of the different sections of a scientific paper
4. Improve their presentation skills and English writing skills
5. Communicate scientific procedures, results, and explanations and engage in arguments based on scientific evidence
6. Avoid plagiarism and be able to paraphrase scientific ideas
7. Evaluate a research paper

COURSE STRUCTURE

- The course includes a theoretical and a practical component.
- The theory will take 4 hours per week and the practical will take 2 hours per week.
- Practical parts will emphasize writing the different sections of a manuscript.

CLASS ATTENDANCE

Students are expected to attend regularly to the class. Students need 75% of total attendance for being able to take the final exam.

GRADING

Throughout the class, the students be responsible for reading and writing. The entire class will be divided into groups. Each group will read examples of scientific papers and write different sections of a manuscript.

Evaluation (assessment) criteria	Percentage
Attendance and class participation	10
Quality of the written assignments	10
Presentation	10
Final exam	70

COURSE TOPICS & TENTATIVE SCHEDULE

Week	Topic
1	Introduction of the course & description of the syllabus - Objectives of scientific writing - Essential parts of a scientific writing
2	Title and Introduction - Style for a good title - Components of introduction - Create context, background information, current field research status, expose a 'gap' or problem in the field, explanation of your present research
3	Materials and Methods - How to write the Materials and Methods Section

	<ul style="list-style-type: none"> -Basic Points to include -Describe and justify the experiment design -Follow rules of grammar
4	<p>Results</p> <ul style="list-style-type: none"> -Presentation form; Text, Tables, Figures -Describe illustrations, graphs, diagrams, tables -Use of statistic in presentation of results
5	<p>Discussion and Conclusion</p> <ul style="list-style-type: none"> -Purpose of discussion -Speculation in the discussion -Length of the discussion -Citations in the discussion - Conclusion
6	<p>Summary or Abstract</p> <ul style="list-style-type: none"> -Writing the summary
7	Authorship, acknowledgements, citations and references
8	Editing for readability and style
9	Writing a proposal
10	Publishing process/ review process/ Paper format
11	Oral presentation at a scientific seminar
12	Design and prepare posters for conferences
13	Presentation
14	Final exam

RECOMMENDED READINGS

Strunk, Jr. W. and White, E. B. 2000. The elements of style. 4th edition. Allyn & Bacon. 105 pp

Glasman-Deal, H. 2009. Science research writing: a guide for non-native speakers of English. Imperial College Press. 272 pp

Schimmel, J. 2011. Writing science: how to write papers that get cited and proposals that get funded. Oxford University Press. 221 pp

Townsend, D. J. and Bever, T. G. 2011. Sentence comprehension: the integration of habits and rules. MIT Press. 455 pp