Write Grow Glow

A workshop series for PhD students in Technology and Natural Sciences

SYLLABUS

Credits (equivalent to): 4 ECTS

(The workshops can be taken as a non-credit course if participants choose not to do the examinations. Further information can be found in *7. Certificates*.)

Syllabus valid from: VT 2018

Responsible Department: Academic Resource Centre, University Library

1. Requirements

The workshop series is most beneficial to PhD students in Technology and Natural Sciences in the first or second year of their programme.

2. Learning outcomes

After completing the workshop series, participants shall be able to:

Knowledge and understanding

- analyse, apply, and update their knowledge of contemporary principles and approaches for conducting some key research elements at PhD level (including critical reading, working with a systematic literature review, writing abstracts, presenting research, and writing papers)
- continue to develop an understanding of the features of different genres, registers, and styles of scientific writing
- enhance their use of subject terminology and academic English
- enhance their use of available tools for information literacy (information evaluation, information selection, data management, etc.)

Competence and skills

- continue to develop critical thinking and analytical skills
- continue to develop individual and group-work skills
- demonstrate the ability to apply the knowledge, tools, and strategies introduced in the workshops in their own research/writing through completing the activities and assignments

Judgement & approach

- continue to develop an understanding of academic literacies as social practices
- continue to develop an understanding of writing as a process of meaning-making and as a craft
- continue to develop an open-minded attitude towards research in different fields and disciplines

3. Workshop series structure

The series covers three main domains: Research competence, Language support, and Information Literacy, and is organised in the form of workshops, following Active learning and Participatory approach in order to enhance research support, critical thinking, and collaborative learning.

- Workshop 1: Mastering the maze of an article: Critical reading and extracting content
- Workshop 2: Down the rabbit hole: Working with the literature review
- Workshop 3: Extracting the cream from the milk: Writing an abstract
- Workshop 4: Through the eyes of others: Presenting your research
- Workshop 5: Eating the elephant one bite at a time: Writing the first article



4. Individual workshop objectives

Workshop 1 (Critical reading)

Participants:

- identify and discuss some key principles for critical reading
- notice the language used for different sections in scientific articles, for example IMRAD papers or technical reports
- understand statistics
- be introduced to some databases for science and engineering and learn to evaluate the credibility of journals

Workshop 2 (Literature review)

Participants:

- understand and analyse the overall purposes and some common expectations and issues when working with a systematic review of literature
- work with some concept mapping approaches
- learn how to identify and use key words to find relevant literature
- · notice the language for reporting, commenting, and reflecting on previous research

Workshop 3 (Abstract writing)

Participants:

- identify common structures and components of abstracts and analyse the quality of abstracts (including extended abstracts) within their own field
- learn how to evaluate the credibility of information
- learn some techniques to condense the abstract content (removing redundancy)

Workshop 4 (Presenting research to an audience) (including posters and oral communication) Participants:

- identify and analyse the features/qualities of an effective presentation (developing, preparing, and delivering a presentation)
- discuss the use of scientific visuals
- learn about copyright and related issues

Workshop 5 (Writing the first paper)

Participants:

- analyse and explain the features of an article in their particular field, using relevant peer-review process
- discuss the ways to find a voice and a style
- learn about some language features for coherence and cohesion of a text

5. Forms of instruction

The series is organised into five workshops on Thursdays, 13-15.30, Conference Room 1, University Library, on the following dates: 22 March, 5 April, 12 April, 19 April, and 26 April, Spring term 2018.

Participants are expected to actively participate in and contribute to all activities before, during, and after the workshops. A typical workshop is structured into: pre-workshop tasks, discussions, presentations, and hands-on/practice.

6. Evaluation and assessment

(For participants who would like to apply for credits for this series, which is equivalent to 4 ECTS.)



Assessment includes both ongoing, formative assessment (pre-workshop tasks, in-class discussions and activities) and final summative assessment.

By the end of the series participants should have completed four assignments: 1) a sample from their own literature review; 2) an abstract manuscript; 3) a short oral presentation of their research; and 4) a reflective text on their information searching process. More specific guidelines and assessment rubrics will be provided to participants.

7. Certificates

Option 1: If participants wish to apply for credits at their department, the suggested number of credits of the series is 4 ECTS. This applies to participants who have attended all five workshops and completed the examinations.

Option 2: A certificate of participation will be given to participants who have attended all five workshops as a non-credit course.

Option 3: Participants can sign up for one or more workshops according to their needs. In this case no certificate is given.

8. Literature

Required readings:

A number of journal articles and thesis excerpts in Technology and Natural Sciences will be provided by the instructors and participants.

Suggested literature:

Cargill, M & O'Connor, P. (2013). *Writing scientific research articles: Strategy and steps*. Wiley-Blackwell. Glasman-Deal, H. (2009). *Science Research Writing For Non-Native Speakers Of English*. ICP. https://ebookcentral.proquest.com/lib/umeaub-ebooks/detail.action?docID=1681704

Goldbort, R. (2006). Writing for science. New Haven: Yale University Press.

Markey, K. (2015). *Online searching: a guide to finding quality information efficiently and effectively.* Lanham: Rowman & Littlefield.

Mkandawire, M. (2011). *Ecowriting: Advice to ESL on effective scientific writing, environmental sciences, engineering, and technology.* Nova Science.

Schimel, J. (2012). Writing science: How to write papers that get cited and proposals that get funded. Oxford: OUP.

Thomson, P., & Kamler, B. (2016). *Detox your writing: Strategies for doctoral researchers (1st ed.)*. New York, NY: Routledge.

Wallace, M. & Wray, A. (2011). *Critical reading and writing for postgraduates*, 2nd ed. London: Sage. Williams, J. M. & Bizup, J. (2017). *Style: Lessons in clarity and grace*. 12th ed. Pearson.

8. Instructors and contacts

Mai Trang Vu, PhD, <u>trang.vu@umu.se</u> Helen Hed, PhD, <u>helen.hed@umu.se</u>

