Georg-August-Universität Göttingen Universität Kassel/Witzenhausen Module M.SIA.A15M: Scientific writing in natural sciences

Learning outcome, core skills:

In the course of their study programme, when compiling their MSc thesis and for their further (academic) career, students have to deliver a variety of scientific texts. Therefore, this module aims at presenting and discussing the main principles of such texts. It provides training in how to write different types of essays, abstracts, grant winning proposals and complex texts (chapters) in preparation and writing of the master thesis research. At successful completion of this module, participants will be able to:

- · differentiate the structure and format of various types of scientific texts;
- search <u>scientific literature</u>, set up and manage an electronic literature database and compile reference lists;
- <u>write</u> term papers, grant proposals, conference abstracts, and final thesis (chapters);
- compile scientific <u>tables and figures</u> and be able to decide which type of data is best expressed in which format;
- apply the rules of good scientific practice;
- · give and receive constructive feedback on scientific texts.

Workload:

Attendance time: 56 h Self-study time: 124 h

Course: M.SIA.A15M.C **Scientific writing in natural sciences** *Contents*:

To provide participants with theoretical basics and practice these, the module will offer a mixture of lecture and exercises. Within the course a variety of facets and techniques of scientific writing will be imparted that graduate SIA students should be able to master. Consequently, participants are introduced to scientific literature search and analysis, good scientific practice and how to avoid plagiarism. Additionally, guidelines for creating concise tables and figures are presented. To be prepared for their master thesis work, students will be taught how to write different scientific text documents such as grant proposals and conference abstracts. By reviewing and discussing a scientific article and peer-reviewing an abstract of a fellow student by using an online tool, module participants will train how to give and receive constructive feedback. Finally, students will choose a topic for their term paper (see below) to further apply the newly acquired knowledge.

Examination: 3 short written assignments (approx. 4 pages, 50%) are to be handed in during the semester and one major text (term paper, approx. 6 pages 50%) is to be submitted at the end of the semester.

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Admission requirements:	Recommended previous knowledge:
none	Basic knowledge of Word (Microsoft or Open Office) and Adobe Acrobat.
Language: English	Person responsible for module: Prof. Dr. Eva Schlecht

Course frequency: each winter semester	Duration: 1 semester[s]
Number of repeat examinations permitted: twice	Recommended semester: 1 - 3
Maximum number of students: 30	