Grading sheet - Advanced Lab course program (FP for M.Sc., B.Sc., and LA students)

FP-I ☐ FP-II ☐ FP-LA ☐

Experiment:	
Measurements finished on:	
Submission date of protocol:	
Protocol received on time (yes/no):	

Students: We consider a well-written and scientific protocol to be an essential part of your lab course. You must follow the honesty of science rules, while drafting your protocol and use scientific language. In case your choice of language is too colloquial, inaccurate or careless, assistants or we may deduct points. You can use the following checklist as a guide for writing your protocols.

Assistants: You can use the following checklist as a guide to grade the protocols. Please fill out the overall performance table.

Short summary and list of content

Abstract (max. 200 words)

Write about motivations, goals, and methods of the experiment
Include the most important measurement results and uncertainties

Table of content

Find proper chapter and section headlines (include page numbers)

List of figures and tables

Choose proper figure/table headings and write concise captions

Introduction of theories and methodologies (about 3-4 pages)

Introduction of topic / important theories, definitions, formulas, and concepts

Concisely describe important concepts and formulas, including proper citations of original work

Description of used methodologies

Again using proper citations of original work and references to the relevant part of your protocol

Main part / results

Document well structured

Concise description of scientific question addressed by each part of the experiment

Description of setup and measurements (for each part)

Include all relevant materials and lab equipment and illustrate important schematics

Proper illustration and description of results (for each part)

Use graphical representations of raw data including uncertainties and list all applied experimental parameter settings

Detailed description of the data analysis (for each part)

Discussion of uncertainties (for each part)

In particular, carefully separate between statistical and systematical uncertainties and indicate those properly

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Summary and concluding discussion (about one page)

Summary of the results of the data analysis

Give the most important results and include uncertainties

Discussion of results (in reference to and in view of your introduction)

Are measurements limited by statistics or systematics? How would you improve the methodologies in order to increase the measurement precision?

Bibliography / Supplements

Complete and valid bibliography

You may cite work that can be accessed and checked by your reader. In general this is only true for published references. Thus, old protocols from you or other students are no valid reference. Internet sources are valid only if the author(s) is/are known in principle (Wikipedia usernames are not sufficient).

Format of references

E.g., author(s), title, journal/book/thesis, year

Usage of citations

Proper and sufficient citations in the protocol

Attachment of lab notes

Well documented, complete, and legible lab notes are original work of students. Data used for analysis agrees with data from lab notes. Lab notes were taken during the experiment, this has been confirmed by the assistant (signature!)

Feedback given to students – YES/NO (if not, please give reasons here)

Overall performance table:

Student	#1	#2
Entrance exam (20 %)		
Lab performance (20 %)		
Protocol (60 %)		
TOTAL		

Grading scale	1,0	1,3	1,7	2,0	2,3	2,7	3,0	3,3	3,7	4,0	5,0

	Name	Date and signature
Student #1:		
Student #2:		
Assistants:		

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