

PHYS-523

Spring 2026

Caroline Riedl



Timeline of PHYS-523 (spring 2026)

graded: E=ELOG, P=presentation, R=report

ELOG: 15%

week	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15														
date	Jan 20	Jan 22	Jan 27	Jan 29	Feb 3	Feb 5	Feb 10	Feb 12	Feb 17	Feb 19	Feb 24	Feb 26	Mar 3	Mar 5	Mar 10	Mar 12	Mar 24	Mar 26	Mar 31	Apr 2	Apr 7	Apr 9	Apr 14	Apr 16	Apr 21	Apr 23	Apr 28	Apr 30	May 5
%	10		0.7	0.7	0.7	0.6	0.7	0.7	20	0.7	0.7	0.6	0.7	0.7	0.7	0.7	0.6	0.7	0.7	0.7	0.6	0.7	0.7	0.6	0.7	0.7	0.6	0.7	35
running %	0	10	10	10	10.7	11.4	12.1	12.8	13.5	14.2	34.2	34.9	35.6	36.2	36.9	37.6	38.2	38.9	39.6	59.6	60.3	61	61.6	62.3	63	63.6	64.3	65	100
E	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17		18	19	20	21	22	23	24	25		
P																													
R																													

5-min presentation: 10%
plans for the semester

progress
presentation
and report I 10%
10%

progress
presentation
and report II 10%
10%

final
presentation
and report
15% 20%

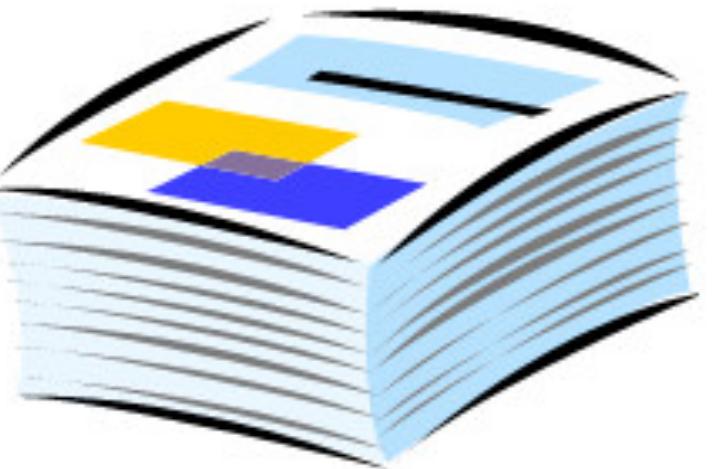


Gradable objectives

- 10% - Project talk: plans for the semester
- 20% - Two oral project progress presentations
 - ▶ each (8+2)%, 8% for talk + slides, 2% for updated slides
- 15% - Final project report presentation
- 20% - Two written project progress reports
 - ▶ 1st version and 2nd updated version will be graded, (8+2)% each
- 20% - Written final report
- 15% - Logbook entries (of the 25, the 22 best will be used)
 - 1/3 for being complete (at least the “session log” entry for every session)
 - 1/3 for content - appropriate description
 - 1/3 for style - being well-structured and concise (brief but comprehensive)

Progress Report and Presentation - preparation

- Progress Report: 4-5 pages
- Progress Presentation: 6-8 slides, no more than 15 minute speaking time
- Contents progress report: What has been achieved since the last progress report, what is the plan for the remainder of the semester?
- Final Report: 10-15 pages
- Final Presentation: 8-12 slides, no more than 20 minutes speaking time
- Contents final report: What has been achieved throughout the semester?



Hints - how we will grade the reports and talks

50%: Topical content

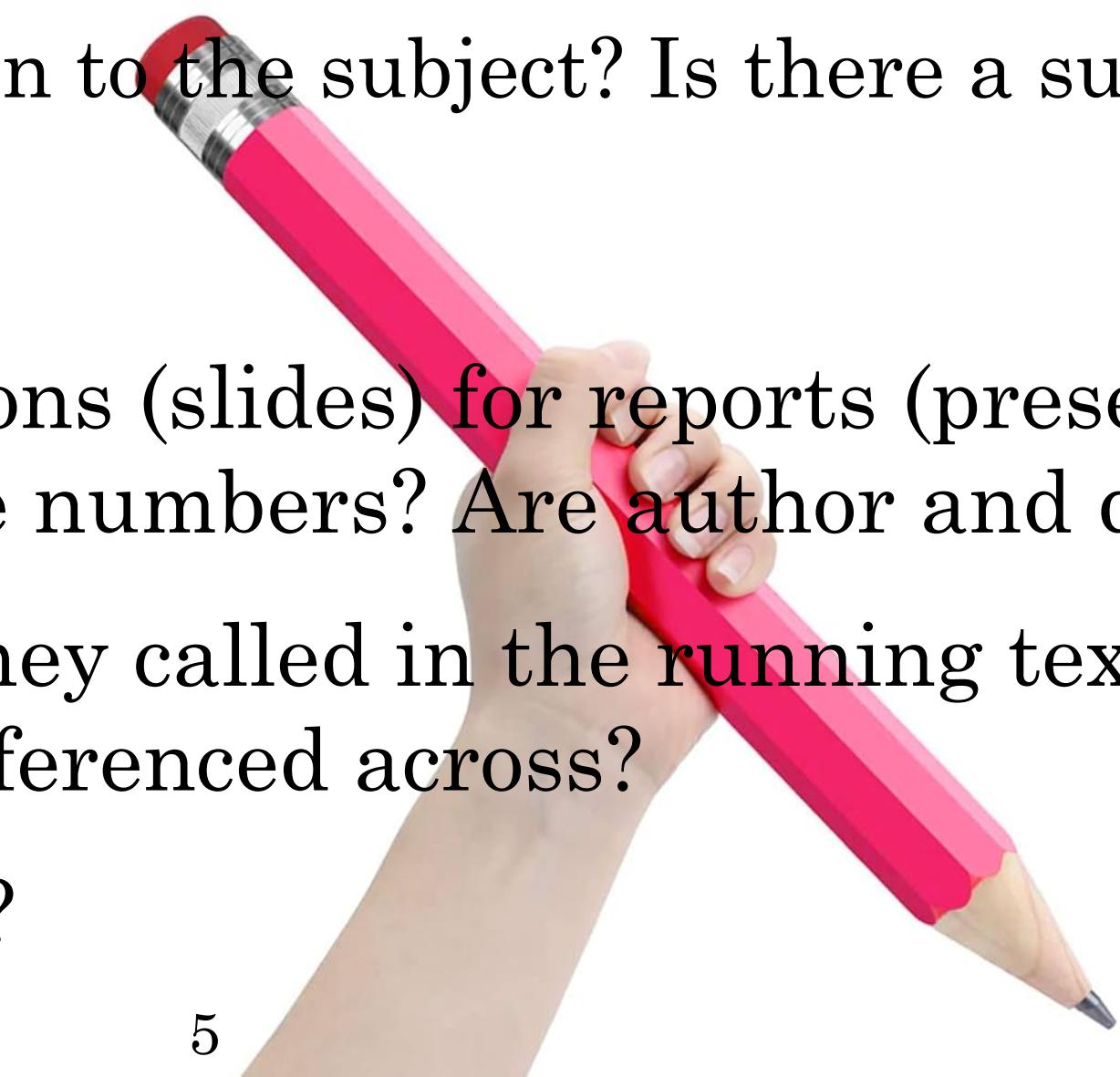
- ▶ Are there factual errors?
- ▶ Is specialized language applied in the correct way?

25%: Quality of scientific message

- ▶ Is the writing style scientific and appropriate for a technical text?
(no slang, no generic usage of words, quantifications where applicable)
- ▶ Are the messages precise and comprehensible?
- ▶ Are appropriate references given?
- ▶ Is there a brief but appropriate introduction to the subject? Is there a summary?

25%: Technical form

- ▶ Is the document well structured in sections (slides) for reports (presentations)? Are the section (slide) titles appropriate? Are there page numbers? Are author and date documented?
- ▶ Are figures and tables numbered? Are they called in the running text, and are image and table captions given? Are sections correctly referenced across?
- ▶ Are references listed in a correct format?



Progress Report and Presentation - advice

- Follow the advice given in Celia Elliott's lectures (fall 2025).
- Make use of your ELOG entries to reconstruct your project's history.
- Make use of your project management timeline and use it to inform your progress and the next steps.



E-LOG - making entries

- <https://my.physics.illinois.edu/undergrad/elog>

The image shows a composite screenshot of the E-LOG system. In the top right, a modal window titled "ELOG: VIEWING LOGS WITHIN PHYSICS 523 SPRING 2026" displays two log entries: "Physics 523 Spring 2026" (criedl 1/14/2026 10:32:09 AM) and "Physics 523 Fall 2025" (rwiltfon 6/16/2025 10:51:17 AM). In the bottom right, a large text area contains a log entry with the following details:

2026-01-14
Task:
Setting up ELOG for the spring semester 2026
Description:
The fall 2025 ELOG was copied to the spring 2026 ELOG. All settings were taken over (but not entries).
Summary:
Setting up the spring 2026 ELOG was straight forward. It is ready to use.

On the left, a form for "Editing log: New subject" is shown. It includes fields for "Entry time" (8/5/2025 1:46:10 PM), "First author" (Caroline Riedl), "Second author" (Start typing name, select net), "Third author" (Start typing name, select net), "Experiment" (- please select -), "Post type" (- please select -), "Subject" (New subject), and "Text" (a rich text editor). A dropdown menu for "Subject" lists "Cryogenics", "Medical Applications", "Muon Tomography", "Radiation Hardness", and "Test". A dropdown menu for "Post type" lists "Analysis", "Calibration", "Debugging", "Issue", "Measurement", "Note", "Preparation", "SessionLog", "Set-Up", and "Testing". A "Available templates" dropdown menu shows "General" and "SessionLogMuonTomography", with "General" selected. A "Choose a template" note states: "The template you chose will be inserted after any text you may already have in your log."

E-LOG - search function

Search for student name, experiment options, post type options

Start date End date Search within experiment options Search within post type options Refine search

mm/dd/yyyy mm/dd/yyyy Set Dates

Logs

<input type="checkbox"/>	ID	Date	Authors	Experiment	Post Type	Subject	Attachments
<input type="checkbox"/>	14366	7/31/2025 9:37:13 AM	Yuk Tung Liu	Test	Testing	Exploring eLog	
<input type="checkbox"/>	14344	7/22/2025 10:35:03 AM	Caroline Riedl	Test	SessionLog	2025-07-22	
<input type="checkbox"/>	14338	7/21/2025 4:35:39 PM	Caroline Riedl	Test	SessionLog	2025-07-21	
<input type="checkbox"/>	14337	7/21/2025 4:31:47 PM	Caroline Riedl	Test	Note	My idea	
<input type="checkbox"/>	14336	7/21/2025 11:56:47 AM	Caroline Riedl	Test	Set-Up	Setting up the Muon Tomography focus area (test entry)	

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A few ELOG remarks

- Of all sessions (days of class), the best 22 sessions will be graded .
- The weight of the ELOG grade to the total grade is 15%. The ELOG grade is composed as follows:
 - $\frac{1}{2}$ for being complete (at least the "SessionLog" entry for every session)
 - $\frac{1}{2}$ for content - appropriate description
 - $\frac{1}{2}$ for style - being well-structured and concise (brief but comprehensive)
- For every class, every student is expected to make at least the SessionLog entry - not one entry per topical group, but one entry per student. It is recommended to keep the SessionLog brief and to move details to other posts (see next bullet) for a better overview.
- Students are encouraged to make further ELOG entries to (for example) detail an experimental setup, describe a specific problem or debugging log, and document purchases.
- Students are expected to make use of the various “Post Types” - beyond the mandatory SessionLog, there are “Analysis”, “Calibration”, “Debugging”, “Issue”, “Testing”, “Purchase”, and others. Let Caroline know if you would find additional post types useful.
- Students are expected to also mark each of their logbook entries with their respective “Experiment” tag (Cryogenics or Muon tomography).

Our policy on the use of AI tools

Generative AI systems, such as ChatGPT, can be useful tools to help organize your project tasks, brainstorm solutions, and debug issues. You are encouraged to use AI as a resource to clarify technical concepts, refine ideas, and troubleshoot problems—similar to consulting a peer, TA, or instructor. However, AI should not be used to directly generate solutions or write code for you.

If you use generative AI, you must credit it by including a comment or note that identifies the AI as a source and briefly describes how it was used (e.g., debugging a function, refining an approach, or organizing tasks). This ensures transparency and academic integrity.

The goal of this course is to foster independent problem-solving and critical thinking in complex technical projects. While AI can support your work, it must not replace the learning and problem-solving process. Using AI to circumvent these steps or relying on pre-generated solutions hinders your growth and is considered academically dishonest. As with all academic tools, AI should be used responsibly to support, not replace, your learning.