

## REGULATION OF THE 1<sup>st</sup> PHYSICS LABORATORY

1. Laboratory exercises in physics take place once a week for three lesson hours.
2. Students perform laboratory exercises in two-person teams (in special cases, with the consent of the teacher, the teams may consist of three persons). These are the so-called laboratory groups.
3. Individual laboratory groups perform exercises according to the schedule set and given by the teacher.
4. Each laboratory exercise is assigned an appropriate number/symbol through which the exercise is identified in the schedule and in the instructions.
5. Each laboratory group performing the given exercise has its own supervisor/facilitator who assigns final tasks to be performed, supervises the implementation of these tasks, accepts the report and gives an evaluation of the performance of a given laboratory exercise.
6. Each student performing physics laboratory exercise for the first classes brings an **Individual Laboratory Card** printed on stiff paper. The Card is available on the website [https://ftims.pg.edu.pl/documents/10673/21385541/Laboratorium\\_fizyczne-1.pdf](https://ftims.pg.edu.pl/documents/10673/21385541/Laboratorium_fizyczne-1.pdf) with other didactic materials. The student enters the symbols and dates of the consecutive exercises in the Card. In these Cards the supervisor/facilitator confirms the student's performance of the measurements, handing in the report and marks the student's preparation for the exercise.
7. Each student before commencing laboratory classes is required to:
  - a) get acquainted with the subject of the exercise set out in the schedule;
  - b) prepare theoretically for carrying out the tasks given in the instructions (i.e., recall basic physical laws, formulas and dependencies as well as the meaning and dimension of the basic physical quantities associated with the exercise, read the method of conducting measurements and analysis of measurement uncertainties);
  - c) prepare and bring with them a sheet of graph paper, millimeter paper and all other necessary equipment/instruments to prepare the data and the report;
  - d) **leave in the GUT locker room any large outerwear, backpacks, bags and other similar items.**
8. Each student after coming to the laboratory should:
  - a) go to the designated measurement station;
  - b) wait for the supervisor who checks their theoretical preparation and allows them to perform the exercise, assigning tasks to be carried out;
  - c) under the supervision of the supervisor familiarize themselves with the measurement system and possibly make the necessary connections. **DO NOT** switch on the sources of voltage and other measuring devices yourself, without the knowledge and agreement of the supervisor. **In the event of arbitrary switching on and damage to the instruments, the student is materially responsible for damages;**
  - d) perform the designated measurements as described in the script, saving the results in tables (remember the units!). The supervisor can modify the scope of tasks to be carried out;
  - e) after completing the measurements, order the measurement station;
  - f) obtain confirmation of the tasks performed in the form of the supervisor's signature in the Laboratory Card.
9. Each laboratory group prepares a report, which should contain: a headline, a short introduction with the description of the implementation of tasks, all necessary measurement data collected in a clear form, graphs and calculations, giving the formulas and dependencies used, uncertainty analysis containing formulas and sample calculations, conclusions with the final results set out in the appropriate form and their discussion.

10. **The report should be handed in** to the supervisor **before commencement of the next laboratory exercise**. In justified cases, the supervisor may agree to extend the deadline for submission of the report for one week.
11. The condition for passing the physics laboratory exercises is to complete and pass all the exercises provided for in the schedule and to obtain a positive final grade issued by the group's supervisor on the Laboratory Card.
12. A student who, **for justified reasons, did not perform the exercise within the time provided for in the schedule**, is obliged, in agreement with the group's supervisor, to do it as soon as possible after they pass a theory check. It is possible to perform an overdue exercise with another group, of course with the consent of the person conducting the exercise. The student hands the report to the own group supervisor.
13. The justified reason for non-performance of the exercise within the period provided for in the schedule means:
  - a) **any absence** that may be justified by a doctor, police, judge or other official services;
  - b) **not allowing the student** to perform the given exercise due to their insufficient theoretical preparation and due to any negligence or breaking applicable laboratory regulations or health and safety regulations.
14. If the student has not been allowed to perform the exercise due to their insufficient theoretical preparation, a maximum of two correction approaches are available: the first with the supervisor/person conducting the given exercise, the second with the main laboratory supervisor.

If the second approach to pass the theoretical preparation for a given exercise is unsuccessful, the student ultimately loses the opportunity to perform and pass it.
15. **The student must pass the laboratory exercises till the end of the semester** in which the exercises are carried out (i.e. before the beginning of the basic examination session). Failure to meet the above requirement entails the obligation to repeat the entire cycle of laboratory exercises in the next academic year.
16. All issues not covered by these regulations are resolved/solved by the main laboratory supervisor.