General Physics Laboratory Safety Guidelines

Universal Physics Laboratory Agreement for Georgia State University

1. Be familiar with and follow these General Physics Laboratory Safety Guidelines.
2. Prepare before you come to lab. Read your laboratory manual or other assigned readings and instructions carefully before lab. Pay close attention to any safety concerns.
3. Listen carefully to instructions given before, during and after the lab.
4. Come to the laboratory prepared to perform laboratory experiments or activities.
5. Come to the laboratory dressed appropriately for all possible safety hazards. Closed-toed shoes must be worn in all science laboratories. Open-toed shoes, shoes with holes or openings on the foot, sandals, flip flops, ballet slippers, flats which expose the top of the foot, high heels, and platform shoes shall not be worn to the science laboratory. Laboratory activities may expose you to heated or heavy items that may injure the feet if spilled or dropped.
6. Use appropriate personal protective equipment, such as goggles, when working with projectiles, sources of heat, or as directed by your instructor.
7. Do not eat, drink, smoke, chew gum, or apply cosmetics in any laboratory room. Do not taste or put anything into the mouth in the laboratory.
8. Georgia State University prohibits student use of cell phones, pagers, or similar communication devices in classrooms and laboratory areas. Exceptions to this policy, due to special circumstances, shall be at the discretion of the Laboratory Coordinator or Instructor in the individual area.
9. Students are not permitted in the laboratory without the supervision of an instructor at any time. Please wait outside the room until your instructor arrives. Only students officially enrolled in the course may be present in the laboratory except for brief tours/visits with the Laboratory Coordinator or instructor present.
10. Students are not permitted in the laboratory storage areas at any time.
11. Students who have, or who develop, chronic medical issues such as (but not limited to) hypoglycemia, diabetes, epilepsy, heart ailments, any other medical condition which may cause sudden loss of consciousness, and students who are pregnant or nursing, should consult with their physicians or health care providers as soon as possible about potential risks associated with participation in a science laboratory. Such students assume all liability if they decide to remain in the laboratory portion of the class. A student who wishes to withdraw from a laboratory after consultation with his/her physician or health care provider should submit a letter from the physician or health care provider indicating that the student should not continue in the laboratory due to a health risk.
12. IMMEDIATELY notify your instructor for assistance if you are injured, or if any type of accident occurs.
13. Familiarize yourself in advance of the location and proper use of safety equipment such as fire alarm, fire extinguisher, and fire blanket.
14. Maintain a neat laboratory workspace with work area and aisles free of personal items.
15. Conduct only those experiments authorized by the syllabus or the instructor.
16. Never handle equipment, supplies until you have been given specific information on their use and safety considerations.
17. Follow the guidelines for the use of equipment and supplies including the following:
   i. Observe and respect all safety signs on equipment.
   ii. Use all equipment and supplies only in accordance with their intended purpose.
   iii. Be aware of mechanical, electrical and laser safety guidelines listed below.
18. Most of the experiments are computer-controlled. Students are not allowed to download, install, remove or modify any software on the lab computers.
19. Do not distract or startle other people when they conduct their experiments. Any student who endangers another's safety or his/her own safety will be forbidden use of the laboratory.
20. Damage, destruction, or theft of Georgia State University property is prohibited and will be subject to punishment prescribed in accordance with the Georgia State University Student Handbook or other appropriate policies.
21. Check the work space before leaving the laboratory for personal items. Do not leave personal items in the laboratory.

22. Clean up after yourself in all laboratory areas and leave the work area the way you found it when you came to the lab.

23. It is the goal of Georgia State University to provide a safe and effective environment for students and employees to learn and to work. Generally, children under the age of sixteen (16) are not allowed in the College classroom(s). Due to the particular dangers in the University laboratories, under no circumstances, whatsoever, should children be allowed in the University laboratories. The policy shall not apply to students under the age of sixteen who are enrolled in a course or program, either for credit or non-credit, or recreation, or who are attending any event on campus which is open to the public.

Mechanical Hazards:
1. Students should be aware of heavy masses and pulleys use in mechanical experiments. Hands or feet can be caught between a moving heavy mass and floor or table surfaces; fingers and clothing can be caught between ropes and pulleys.
2. Strong permanent magnets may be used in laboratories. There is a potential risk of pinching hands between objects and magnets.
3. Use safety goggles when working with projectiles. Keep clear of the projectile path and impact area.
4. Stretched or compressed springs can pinch fingers or unexpectedly expand.

Electrical Hazards:
- Be aware of the voltage used in the experiment. Follow the safety information for each experiment in which voltage/current sources are used.
- Only lab instructor is allowed to turn on/off or adjust the DC voltage outlets.
- The DC voltage outlets are designed to be used for the laboratory experiments only. Do not insert anything in them. Do not plug any wires in them other than required for the conducted experiment.
- Lab instructor should check student’s circuit before it is powered. Do not power or plug in the electrical circuit required by the experiment, until it is checked by the lab instructor.

Laser Hazard:
- Low power helium-neon or diode lasers (Class IIIa, less than 5mW) emitting visible light are used in optical experiments.
- Remove all watches and jewelry from your hands before working with the laser light as those can cause hazardous reflections.
- Do not look directly into the beam or at its non-diffused reflection.
- Do not aim the laser with the eye.
- Do not use sunglasses to protect the eyes. If safety goggles are required by the experiment, use the goggles provided with the experiment.
- Before laser operation, warn all individuals present of the potential hazard.
All science laboratory students are required to comply with General Physics Laboratory Safety Guidelines as specified in this document and any additional guidelines that may be listed in their course syllabi. Any student who does not comply with these General Physics Laboratory Safety Guidelines will be subject to the following penalties:

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<thead>
<tr>
<th>First Safety Violation</th>
<th>Consequence</th>
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<tbody>
<tr>
<td>Warning</td>
<td>Removal from laboratory class and assignment of a zero for that laboratory class period. Depending on the circumstance a damage fee may apply.</td>
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<table>
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<tr>
<th>Second Safety Violation</th>
<th>Consequence</th>
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<tbody>
<tr>
<td>Third Safety Violation</td>
<td>Third violation constitutes willful disregard of laboratory rules. See GSU Policy on Disruptive Student Behavior in an Academic Setting. Disciplinary sanctions as deemed appropriate as specified in the Student Code of Conduct, which can include expulsion.</td>
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General Physics Laboratory Safety Guideline Agreement
Universal Physics Laboratory Agreement for Georgia State University

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester and year</th>
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<tbody>
<tr>
<td>Instructor</td>
<td>Meeting Day/Time</td>
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I acknowledge and agree to all of the following:

I have received a printed copy, or the address of an electronic copy, of the General Physics Laboratory Safety Guidelines.

I have read carefully and understand all of the General Physics Laboratory Safety Guidelines provided to me.

I understand that I am responsible for following the General Physics Laboratory Safety Guidelines at all times.

I understand that my safety and the safety of my classmates depend on my actions in the science laboratory.

I understand that failure to follow these General Physics Laboratory Safety Guidelines could result in a serious accident or injury.

I understand that students who do not follow the General Physics Laboratory Safety Guidelines may be asked to leave the laboratory and will receive no credit for the missed exercise or assignment. Multiple violations of the General Physics Laboratory Safety Guidelines could result in disciplinary sanctions, which can include expulsion.

I am aware that science laboratories contain materials and devices which, if handled improperly, may be hazardous, particularly for students with chronic medical issues or students who are pregnant or nursing. I will consult my physician or health care provider about potential risks associated with the laboratory if I have a medical issue or concern. I understand that if I wish to withdraw from the laboratory after consultation with my physician or health care provider, I will need to submit a letter from the physician or health care provider within the first two weeks of class indicating that I should not continue in the laboratory due to a health risk. I understand that I assume all liability if I decide to remain in the laboratory portion of the course.

Student Name (printed): __________________________ Panther ID number: ________________

Signature: __________________________ Date: ________________