Lab Policies

Experimental Aerodynamics and Multiphase Flow Laboratory
(ExAM-Flow Lab) at CCNY

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Lab Website: https://liu-lab.ccny.cuny.edu/

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1. General Lab Rules

1.1. Safety and Health

- Lab members are expected to adhere to all lab safety rules at all times. Lab members must complete all required CUNY-CCNY safety training modules for lab operations.
- Lab members should not come to work sick. Please reach out to the PI to request sick leave at the earliest. Stay home and rest and make arrangements for any responsibilities to be handled by co-workers.
- Lab members should maintain their physical and mental health. Good health is critical for your ability to do high-quality work; thus, take breaks when needed, speak kindly to yourself, and visit University Health Services or arrange for a therapist if you need to speak to a professional.

1.2. Lab Chores and Basic Etiquette

- Every lab member contributes to making the lab run smoothly and has dedicated tasks they've agreed to be responsible for. If you have agreed to do a lab chore, please take this seriously and take care of your duties on a regular basis. It's likely the entire lab is counting on you/waiting on you.
- In support of your health/safety and that of your co-workers, please maintain a clean and organized workspace. Much of our lab is common space and items can easily get lost or destroyed. Lab members should strictly adhere to the space and equipment management rules.
- Only research work should be conducted in the laboratory. No personal projects are allowed.
- Unauthorized visitors or students shall not be allowed without the permission of the lab PI.

1.3. Collegiality

- Every lab member shall contribute to a collegial and productive environment that supports learning and research. Everyone in the lab should feel welcomed and appreciated for their contribution. The success of each team member contributes to everyone else's success.
- Racist, sexist, or other inappropriate comments or behavior will not be tolerated.

2. Expectations

2.1. Work Hours

- Lab members are expected to dedicate in research with sufficient time and efforts. It is highly encouraged that all lab members present in the lab/office during normal work hours (10am-5pm, M-F) when they do not have other classes/work outside.
- Keep in mind that you will get out of your career what you put into it. Both hard work and learning to keep a consistent balance for your health and sanity are essential to be competitive for your future career.
- Please reach out to the PI to request approval if you will be out of the lab for a full day or more.
- Please discuss vacation plans with the PI in advance so that we can plan around any extended absences.

2.2. Standing Weekly Commitments

- Attendance at weekly lab activities (including bi-weekly group meetings, workshops, and journal clubs) and Thursday departmental seminars is required. Please reach out to the PI to request approval if you can not attend.
- Every lab member will have weekly meetings with the PI. We will formally discuss your research progress and goals, as well as other issues you may (have) encountered.
    - Remember that I am your advocate, as well as your advisor. I will be able to help you with any problems you might have with (other) students, professors, or staff.
    - Similarly, we should discuss any concerns that you have with respect to my role as your advisor. If you feel that you need more guidance, tell me. If you feel that I am interfering too much with your work, tell me. If you would like to meet with me more often, tell me. At the same time, I will tell you if I am satisfied with your progress and if I think you are on track to graduate by your target date (or to start applying for independent positions). It is my responsibility to explain to you any deficiencies, so that you can take steps to fix them.

2.3. Work Outcomes

- Every lab member is encouraged to attend at least one conference a year. Lab members must make a good faith effort to obtain partial to full costs of meeting and travel expenses. This includes applying for departmental, university, and society

travel grants, volunteering at the conference, and sharing rooms. Whenever possible, I will help fund attendance at one conference per year on the condition that you present a poster or talk. Abstracts must be reviewed by myself and all coauthors prior to the submission deadline. Practice talks and posters will be presented to the lab two weeks prior to the conference. Plan accordingly.

- Every lab member shall make full efforts to write research papers and submit them to high-quality journals for publication.
    - PhD students are expected to publish at least 3 journal papers upon graduation.
    - Master students are expected to publish at least 1 journal paper upon graduation.
    - Undergraduate students are highly encouraged to participate in the paper writing projects.

2.4. Scientific Integrity

- Never manipulate or selectively exclude/expand data to achieve an expected or desired result. This is falsification and ignorance is not an excuse.
- Never use text or content from elsewhere in your writing without citing it appropriately (even if it's something you previously wrote, which is called self-plagiarism).
- Be cautious when using AI tools. It is not allowed to use AI tools to fabricate data, plagiarize content, or generate misleading information.

3. Equipment and Space Management Rules

3.1. Equipment Usage and Maintenance

- All lab equipment must be operated following the manufacturer's instructions and safety guidelines.
- Only trained personnel or authorized users are allowed to handle specialized or hazardous equipment.
- Regular maintenance schedules must be adhered to, and any malfunctions or damages must be reported immediately to the lab PI.
- Shared equipment must be booked in advance using the designated scheduling system, and users should clean and return it promptly after use.

3.2. Space Allocation and Cleanliness

- Workspaces are assigned based on research needs and must be used exclusively for approved projects. Unauthorized storage or activities are prohibited.
- Lab areas must be kept clean, organized, and free of clutter to ensure safety and efficiency. Personal belongings should be stored in designated areas, not on workbenches.
- Hazardous materials must be handled and stored in compliance with institutional and legal safety protocols.

3.3. Access and Security

- Access to the lab is restricted to authorized personnel only. Entry for visitors or collaborators requires prior approval from the lab PI.
- Lab doors should be secured at all hours, and valuable equipment must be locked in storage when not in use.
- Any violations of these rules or breaches of security must be reported promptly to the lab PI.

3.4. Classification of equipment

- **Specialized equipment:** Pulsed laser, PIV camera, continuous laser, cooling plates, freeze dryer, 3D printers, plasma generator, high voltage DC power supply, shock tube, wind tunnel.
- **Highly demanded equipment**: High-speed cameras, thermal camera, photographic camera, camera lenses, syringe pumps, light sources, pressure transducers, force/torque transducers, Schlieren mirrors (large and small sets).
- **Electronic equipment:** DC power supplies, signal/function generator, oscilloscopes, pulse/delay generator
- **Tools:** Wrenches, hammers, tape measures, calipers, multimeter, screws, bolts, nuts, electronic components (resistors, switches, etc.), power cables, BNC cables, ethernet cables, electrical cords, power strips, Allen wrenches, pressure gauges, pitot tubes, optics.
- **Structural equipment:** Aluminum extrusions, brackets, lab jacks, tripods and camera mounts, magic arms, optics mounts.
- **Disposables:** Syringes, needles, tubing, couples, tape.
- **Personal Protection Equipment (PPE):** Safety glasses, laser safety glasses, ear protection, vinyl and nitrile gloves, shock protective gloves, heat protective gloves, helmets.
- **Materials:** Aluminum, wood, acrylic, stainless steel, glass, rubber.