

# Lab Rules and Regulations

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## 1. Lab Computers

- Every student needs to have an account on the MNE computers (includes all the labs and the PC Studio) in order to be able to log in to the lab computers.
- You use your standard PSU username and password to log in. However, if you have not used the PC Studio before, you will need to register at <http://www.mnelabs.mne.psu.edu/> so the local account can be set up and linked to your PSU account, and so our system administrator can get your ID card into the system.
- It takes about a day to get the account activated, so do this as soon as possible – before the first lab!

## 2. Lab Preparation and Precalculations (*Before the lab*)

- Each lab contains an **Introduction** that provides background material for the lab to be performed that week. Each week, *before lab class*, students are expected to read the introduction; failure to do so wastes valuable class time.
- Each lab also contains a “Precalculations” section, with some questions and calculations related to the experiment to be performed. **The Precalculations must be done before the lab, and the TA will collect the completed Precalculations for each student at the beginning of lab class.** If a student fails to turn in the Precalculations at the beginning of class, he or she will receive a late penalty:
  - 10% off if turned in late, but before 5:00 p.m. on the due date.
  - 25% off if turned in late, but before 5:00 p.m. on the first school day after the due date.
  - 50% off if turned in late, but before 5:00 p.m. on the second school day after the due date.
  - No credit if turned in after two school days beyond the due date.
- The Precalculations do *not* have to be typed; however, students *must write legibly*. They need to fill in their name, section number, etc. on a printout of the Precalculations page, and then answer the questions there. **Note that the Precalculations are to be done individually, by each student – not as a lab group**, even though the lab report itself is written as a group. Students may think of the Precalculations as additional individual “homework” for the lab portion of the course. **Precalculations are worth 20% of the lab report grade.**

## 3. Lab Participation

- To ensure that all students are participating in the lab (***no freeloaders!***), the instructor and TA reserve the right to adjust the lab report grade for an individual student, based on how well that student works together with his/her lab partners in both performing the labs and in preparing the lab reports.
- If a student is not carrying his or her fair share of the load, the other group members should contact the instructor and/or TA immediately to discuss options. In extreme cases, the instructor or TA may reassign lab groups in addition to adjusting the lab report grade of freeloading students.

## 4. Lab Experiments (*During the lab*)

- Each lab experiment is designed such that it can be completed within the allotted three-hour class time, including writing the lab report. In particular, you should be able to complete all experiments, analyses, plots, tables, etc. associated with the lab experiment, and answer all the questions, including the discussion questions at the end, within the allotted three-hour class time slot. In rare cases (equipment failure, etc.), if the lab report is not completed in class, you will be permitted to complete the report outside of class, turning it in within the next day or two.
- **Lab reports (one per group) are due at the end of your scheduled lab class. Group lab reports are worth the other 80% of the total lab report grade.**
- Late reports that are not the result of equipment failure or other problems beyond the students’ control will receive a grade penalty according to the following:
  - 10% off if turned in late, but before 5:00 p.m. on the first school day after the lab.
  - 25% off if turned in late, but before 5:00 p.m. on the second school day after the due date.
  - 50% off if turned in late, but before 5:00 p.m. on the third school day after the due date.
  - No credit if turned in after three school days beyond the due date.

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- One lab experiment will be conducted by each group each week, beginning with the second week of classes. (See the lab schedule posted on the course website; “Lab 0” is a demo lab during week 2.)
- Data files generated in the lab should be copied onto the computer’s desktop for backup and for further analysis outside of class, if necessary. Note that any file placed on the desktop will automatically be available on any other department computer on which the student has access. For hardcopy backup, students should bring a USB jump drive to the lab. Students may also e-mail files to themselves and/or to their lab partners.

## 5. Conduct and Safety (*During the lab*)

- No eating or drinking is permitted in the laboratory. Students are free to leave at any time to go to the restroom, get a drink, etc.
- The laboratory workspace must be cleaned and restored to the same conditions as when the laboratory session began. Failure to do so may result in a reduction of score for the lab report.
- Students must always be careful! If at any time a student is unsure of how to operate a piece of equipment, he/she should ask the instructor or TA for assistance. It is best to *ask* if unsure about something.
- Excessive force should never be applied to any piece of equipment. For example, if a connector won’t connect, a valve is stuck, or a crank won’t turn, it should not be forced – the instructor or TA should be asked to assist. This will avoid equipment damage as well as possible personal injury.
- Common sense must be used regarding safety:
  - **Eye protection must be worn at all times around any moving machinery and around laser beams.** (Safety goggles are available in the lab; students may also purchase and bring their own safety goggles if they wish.)
  - Students must never look directly into a laser beam.
  - Care must be exercised when plugging in and using electrical equipment around water experiments.
  - Thermal gloves should be worn when handling hot objects.
- A complete copy of the University's safety guidelines is posted on the wall in the lab. All students should read these guidelines.

## 6. Make-up Labs

- If a student must miss a lab due to illness, job interviews, or for other acceptable reasons, he or she must inform the instructor and/or TA as soon as possible, and must make arrangements to make up the experiment. This can be done during one of the other regularly scheduled lab periods (the student temporarily joins a group from a different section to do the experiment), or the student may come in during lab office hours (or another pre-arranged time) to make up the experiment.
- If the student fails to make arrangements to make up the lab experiment within two weeks after the regularly scheduled experiment is missed, he or she will receive a zero grade for that experiment, unless the circumstances involving the missed lab are determined by the instructor to be acceptable (e.g., extended illness, physical limitations, etc. with a doctor’s written excuse).