Guidelines for use of multi-purpose lab

Archbold Biological Station

4). GUIDELINES FOR THE USE OF THE MULTI-PURPOSE LABORATORY

4.i Multi-purpose lab users are to read this form, sign the 2nd copy and return to the Facilities Coordinator. Share this important information with fellow faculty/instructors and with students before using the lab.

4.ii Visiting faculty/instructors - not Station staff - are responsible for the well being of their students in this laboratory. All visiting students and faculty/instructors must read and sign an Archbold Release of Liability before participating in any activities at the Station and be aware of potential risks.

4.iii This lab was renovated in 2000-2001 with funds from a National Science Foundation award (DBI-Field Station and Marine Labs ##DBI0084141) to improve research and education infrastructure and enhance educational opportunities at Archbold Biological Station. It is designed for access to multi-user equipment for visiting scientists, resident scientists, and graduate students conducting research and for very small graduate or upper level college classes under direct faculty supervision.

4.iv Faculty with visiting classes using the adjacent classroom may use the lab, but access is limited because of the amount of expensive equipment in the lab. Students are not to use the dissecting and compound microscope or the analytical balance in this lab except under direct and continual supervision of a faculty/instructor who is familiar with the equipment.

4.v Students should only be in the multi-purpose lab to:
- retrieve small equipment items stored in the multi-purpose lab
- sieve and wash out aquatic samples in the double deep sink, or use the fridge and freezer
- use the balances under faculty/instructor supervision (normally the top loading balance - not the analytical balance)

4.vi A fee structure is has been established to help cover the costs of maintaining the lab facilities and recharging supplies (see http://www.archbold-station.org/abs/visitorinfo/fees.htm fee schedule).

4.vii Visiting classes, researchers, agency workshops, etc., should ensure they make advanced reservations with the Facilities Coordinator for use of the multi-purpose lab. Time on some equipment items - the microscopes, germinator and the growth chamber – may have to be reserved. To reduce conflicts over access, visitors and
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graduates will not be resident in this lab – it will be for lab access to equipment only. This lab does not substitute for those who need the facilities of the existing Chemistry Lab, where the fume hood is located.

4.viii Visitors will be required to take a brief orientation to the new facilities (please set this up with the Facilities Coordinator) and be initially checked out for use of the laboratory and associated equipment. The Facilities Coordinator will also check out researchers at the end of the session to ensure all equipment is returned.

4.ix Visitors will be required to abide by these guidelines as to the use and care of laboratory equipment and facilities. Visitors may be held responsible for avoidable breakage or losses during their stay in the classroom.

4.x There is a numeric keypad entry to the back door of the lab (same number as the Library). Visitors will be informed of this number on arrival. Instructions to activate and deactivate the keypad are posted inside the lab door. Do not leave the lab unlocked if unattended. In the classroom most cabinets are locked for secure storage; faculty/instructors will be allocated a key for these cabinets as well as a key for the outdoor shed behind the multi-purpose lab that contains the drying oven, furnace and cutting mill.

4.xi The following large items of multi-user equipment are available:

- Microscopes. Olympus BX60 Compound microscope w/phase control and florescence capability. Olympus SZX12 stereoscopic dissecting scope (w/magnification range from 7-90x) includes trinocular tube for mounting camera. PM10SP photomicrographic system.

- LE-Digital camera w/monitor (can be used for both video camera and to capture single frames like a 35mm). These are extremely expensive high quality microscopes and should only be used by knowledgeable users. All instruction manuals are on hand in the lab. The fluorescence capability will only be available on request.

- Windows NT Workstation and printer connected to the microscopes, Archbold Intranet, T1 line Internet access, basic word-processing, spreadsheet and Image Pro image analysis software, and color printer. The Systems Administrator can show how to portray images from here into the classroom environment. Instructions on how to log onto the system as a visitor are posted on the notice board above the computer station. Computer software manuals are stored in the Library, by the copy room; they must be returned. Visitors and faculty/instructors are to sign the Station policy on use of the...
Archbold computer network. Use is a privilege. Policies are posted above the computer station on the notice board. Be especially wary of downloading emails or programs that may lead to the introduction of computer viruses into the Station network. Please avoid printing large documents – waste of paper. Recycled paper is available for use. Visitors may store computer files created during their visit on the D hard drive in the Visitor Folder. All stored files should be deleted before departure; the System Administrator will purge remaining files.

- **Balances.** Toledo Analytical Balance AB104 - only use this for precision work- otherwise use the Ohaus precision top loading balance TS2K
- **Germinator-** Conviron I25L and Growth chamber- Conviron E7/2 (see instructions manual in lab).
- **Orion** pH/mV meter 420A (see instructions manual in lab).
- **Campbell Scientific** CR23X datalogger (see instructions manual in lab).
- **Li-Cor 1905A Quantum Sensors** (LI 905 A) (see instructions manual in lab).

4.xii A small shed outside the Multi-purpose lab supports a:
- Fisher Isotemp Premium Forced Air Lab Oven (225°C, 5.0 ft³) (see instructions manual)

- Fisher Isotemp Basic Muffle Furnace 0.14 ft³ (see instructions manual)
- Wiley Cutting Mill, Tuttnauer/Brinkmann (see instructions manual)
- Safety equipment for drying ovens/muffle furnace (tongs, mittens, face shield, ceramic shelf). Please ensure that safety equipment is always properly used.

4.xiii Part of the multi-purpose lab is a small Wet Lab area for students under faculty supervision, and visiting aquatic researchers. The 4’ x 11’ space has a benchtop, double sink unit and below bench storage for buckets, sieves, etc. The area includes a refrigerator, upright freezer and deionized water supply, and a variety of trays and sifters.

4.xiv Visiting classes may store items in the freezer and refrigerator but they must be labeled and disposed of before the class leaves. No food should be stored in the refrigerator or the freezer – use cottage refrigerators for food storage.

4.xv In addition to these larger equipment items a series of small equipment items and supplies are stored in the multi-purpose lab as shown on the attached checklist.

4.xvi First Aid equipment is in the large black cabinet by the sink area in the adjacent classroom. An Eyewash is available in the multi-purpose lab. Fire
extinguishers are present in the lab and the outdoor shed. In case of an accident Emergency Information and emergency numbers are posted on the Notice Board in the laboratory.

I have read and understand these guidelines for use of the multi-purpose lab at the Station. I agree to abide by the guidelines and convey this information to other participating colleagues, faculty/instructors, and students:

…………………………………
YOUR NAME (print)
…………………………………
SIGNED
…………………………………
DATE
I am responsible for
…………………………………
CLASS/GROUP NAME
Visiting on these dates
…………………………………
DATES of VISIT