Save Energy!

Please close fume hood sash when not in use or at the end of the day!



If you have any questions or concerns please call DEHS at (956) 665-3690



GUIDE FOR SUSTAINABLE SCIENCE LABORATORIES

Laboratories provide hands-on experiences that are a vital part of the <u>U.N. Sustainable Development Goal of Quality</u> Education. Like UTRGV's sustainable classrooms and offices, the labs' operations should reflect the UT System's commitment to sustainable development.

- 1. Complete the assessment 2. Encourage your students 3. Become a Sustainable

| SUSTAINABILITY: above and submit your results to the Office for Sustainability. Allow us to recognize your efforts! | to live by the mantra of "Reduce, Reuse, Recycle." It takes time to build a habit. Development Leader! Work closely with OFS towards a completely sustainable lab! |
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| DID YOU KNOW THAT SCIENCE LABS CONSUME MORE ENERGY | We share an energy-efficient freezer with neighboring labs. We have a policy for cleaning and maintaining a safe fridge environment, including proper labelling and regular defrosting. |
| THAN ANY OTHER UTRGV FACILITY? | We raise temperatures of freezers to the highest safe point to save energy. We store samples at room temperature when safely possible. |
| All individuals can make small changes to their habits to help our communities in the long run. Lab users can do their part to help UTRGV meet system-wide utility-reduction goals! | We share digital versions of documents and "handouts" instead of printing them for the group. We include a "only print if necessary" message in our email footers. |
| We make a habit of closing fume hood sashes and turning off biosafety cabinets and other equipment when not in use. Fume hoods that are left open can consume as much energy as 3.5 homes! Always close unused hoods. | |
| We have changed the settings on our printers to print double-sided, and all other electronics to enter energy-saving modes. | Our lab uses smart power strips to power down devices that are not being used and to protect against voltage spikes. |
| LAB RESEARCH ALSO USES A LOT | We've installed water misers on sterilizers and autoclaves. |
| OF WATER - BUT WE REDUCE OUR USE WHEN POSSIBLE. | We use timers for water valves - set to minimum necessary time. |
| OSL WITLIN FOSSIBLE. | We reduce our use of single-pass cooling and switched to closed-loop cooling wherever possible. |
| Clean water is a limited resource, and the energy needed to purify water for use is also high. Help UTRGV reduce its carbon footprint by saving water. | We clean lab supplies sustainably: filling a sink to rinse glass labware, and only washing full loads of lab coats or aprons. |
| It is our lab's policy to save water. We don't let taps run unchecked. We use ice makers, autoclaves, and stills efficiently. | We use the appropriate water quality for experiments and cleaning. We report leaks and dripping faucets to the Campus Facilities Operations department. Submit service requests via iServiceDesk. |
| OUR LAB MAKES SUSTAINABLE PURCHASES. | We purchase electronics that are the right size for our needs and ENERGY STAR/EPEAT certified when applicable. |
| We use our lab's purchasing power to make a statement! By shopping from | Our lab purchases products with reduced toxic or hazardous chemicals, including cleaning supplies. |
| companies that make a commitment to sustainability, we support their goals and encourage other suppliers to demonstrate environmental stewardship. | Our lab purchases in bulk to reduce wasteful packaging and prefers packaging that is recycled/recyclable. |
| As much as possible, the chain of production for items we purchase involves processes that are not harmful to people, animals, or the environment. We purchase from companies with a stated goal of reducing their negative | We consolidate orders and eliminate purchase orders below \$100. Consolidating orders reduces packaging and reduces the emissions and energy associated with transporting our purchases to campus. |
| environmental and social impacts. | We purchase and use printer paper that is FCS-Certified or recycled. (Look for the "Green" or "Recycled" icon on iShop.) |
| We have established inventory management practices that save the lab money by avoiding duplicate purchases. | We explore options for reuse of unwanted office items and look for surplus resources instead of purchasing new furniture or electronics. |
| WE REDUCE, REUSE, AND RECYCLE TO CUT DOWN ON WASTE. | We recycle traditional recycleables like paper and plastic, and lab recycleables like pipette trays. We use recyclable gloves when possible. |
| | Good inventory management reduces the amount of out-of-date waste produced by the lab. |
| Labs generate waste that can be very harmful to the environment if not disposed of properly. We consider the entire life-cycle of substances and materials used in experiments. | We recycle lab equipment and replace aging equipment with energy-efficient models. |
| We dispose of chemical waste safely. Do NOT pour waste down the drain unless explicitly instructed to do so. "Only rain down the drain!" | We contact the department of Environmental, Health, Safety and Risk Management (EHSRM@utrgv.edu) with hazardous waste pickup requests. |



AT UTRGV, WE PRACTICE SUSTAINABLE LAB HABITS.

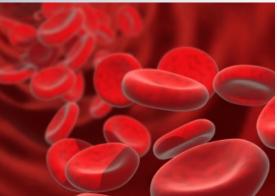
We plan the manner in which we conduct lab studies to be as fiscally responsible as possible while minimizing potential harm to people, animals, and the planet.

| We share sustainable lab habits and rules with all lab users and share the message of sustainability whenever possible. For example, we discuss the sustainable aspects of our experiments and plan how to integrate more. |
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- We do not eat or drink in the lab, but carry a reusable water bottle to stay hydrated while on campus.
- We dress in layers to stay comfortable indoors, because our individual temperature preferences may differ from that of our colleagues.

EHSRM Waste Handling Guidelines













Characteristics of Hazardous Waste: **Ignitable §261.21**

Corrosive §261.22

Reactive §261.23 **Toxic** §261.24

Waste containers MUST be labeled with the word "WASTE" and a LIST of contents. (NO chemical formulas. List all <u>Common</u> names only.)

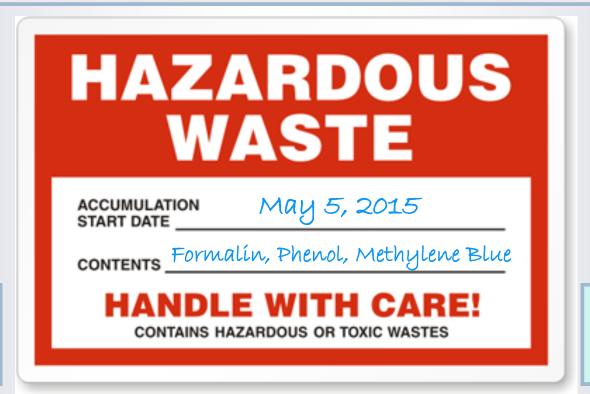
ALWAYS arrange for pick-up through EHSRM via email when waste container is 3/4 full and indicate the accumulation date on the container.

EHSRM also removes unwanted/unused/expired chemicals.

Do NOT delay. Full waste containers must be removed by EHSRM within 72 hours. Do NOT dispose of <u>Hazardous</u> <u>Waste</u> in the regular trash or down the sink!



Prevent spills and odors by twisting the cap closed after each use.





Chemical waste containers must remain closed at all times.

EHSRM will provide the following waste containers upon request:

Sharps, Broken Glass, Chemical, Non-infectious Biological, Bio Hazardous, Radioactive





Sharps Waste: Needles and Blades



Broken Glass Waste



Chemical Waste



Biohazardous Waste*



Radioactive Waste*



For waste pick-up or to request a waste container, email waste@utrgv.edu and include the following:

Bldg./Room/Location, type and amount of waste, number of empty containers needed and any other special instructions. Write the accumulation date and list of contents on each container.