

LRES 582 Streamside Science: Hands-On Approach List of Required Supplies

Students will need to purchase the following items for this class:

1. A bottle of deionized (DI) water or distilled water for rinsing equipment
2. A water depth measuring device
 - a. i.e., pvc pipe or dowel rod from the hardware store, old broom/mop handle, yard/meter stick, paint stir stick or anything that you can mark 10th of a foot increments onto (this needs to be at least as long as your stream is deep).
3. To make your own kick net for macroinvertebrate sampling:
 - a. Two large tool or broom handles (4-6 feet long)
4. To make your own turbidity tube ([click here for directions](#)):
 - a. Clear PVC at least 60cm long
 - b. PVC cap for tube
 - a. [Home Depot](#) has 2ft clear PVC for \$10 and a white cap for \$2 that you can mark with a black marker to make a pattern.
 - b. Other options of materials you could use are provided in the linked document of directions above
5. A plastic container with a lid that you can use to collect stream water
 - a. This should be airtight and covered in tape or black paper so it can keep the light out
6. An incubator for RCARDS coliform test; big enough for eight 4' X 5" RCARDS to sit on the bottom without overlapping.
 - a. If you have access to a drying oven in your school labs that's perfect
 1. A cooler (Styrofoam or other) and 40watt bulb also works.
 2. Or you could use a light table, 3D printer table...anything you can keep out of direct sunlight and at $35\pm 0.5^{\circ}\text{C}$ for 24 hours.
 - b. Once finished, the incubator can be cleaned and sterilized with 10% bleach solution.
7. Bleach: enough to make a 10% bleach solution to dispose of RCARDS from coliform test and clean cooler if using one.
8. A sealable container that is big enough for your liquid waste and a small bag of kitty litter to 'solidify' your liquid waste when done with class. Think large yoghurt/cottage cheese/etc. tub, the plastic 'box' that laundry/dishwasher pods come in, the big red plastic Folgers coffee container or a gallon jug (you might want to cut the top off, so it's easier to pour your liquids (and kitty litter) into
9. Safety supplies to include rubber gloves and safety glasses.