



CLASS NOTES

Indoor Container Gardening

THINGS TO CONSIDER:

- How much space do you have?
- How much are you willing to spend?
- Labor intensive or not?
- What is your motivation?

GROWING METHODS:

Sprouts

- First phase of plant life cycle
- Eat from root to stem
- Mild flavor, adds texture and crunch
- Higher nutritional value

Method and Materials

- ✓ Pick your seeds – ex. sunflower, broccoli, kale, radish
- ✓ Put in container with covering (ex. sprouting lid, cheese cloth)
- ✓ Store in cool, dark area
- ✓ Rinse and drain with clean water daily
- ✓ Grow to ~1-2in
- ✓ Store in fridge up to 5 days



Microgreens

- Fresh pop of flavor to dishes
- Higher concentration of vitamins and minerals

Method and Materials

- ✓ Pick your seeds – ex. broccoli, radish, kale, herbs, etc.
- ✓ Put in container with growing medium (ex. coco coir, paper towel, container soil)
- ✓ Place in sunny window, keep growing medium damp
- ✓ Grow to ~2-4in tall
- ✓ Harvest by cutting with scissors
- ✓ Store in fridge up to a week



Windowsill Greens and Herbs

- Needs good amount of light
- Consistent access to herbs and small greens
- Growing time is ~15-40 days

Method and Materials

- ✓ Quick growing herbs and greens seeds – ex. lettuce, arugula, spinach, basil, cilantro, parsley
- ✓ Potting soil in container with drainage
- ✓ Sunny windowsill or grow light
- ✓ Pick and pluck for continued harvest



Growing from Scraps

- Regrowing food from purchased produce
- Visually intriguing
- Need sunlight

Method and Materials

- ✓ Root end of veggies intact – ex. green onions, celery, beet, carrot, etc.
- ✓ Place in bowl of water
- ✓ Harvest after new growth appears
- ✓ Continue to harvest till plant is spent

Hydroponics

- Growing plants such as lettuce, herbs, and tomatoes in a water bath. Very high growth rate.
- Inputs: water, fertilizer, electricity for lights and pump
- Simple design, can be scaled from a small countertop system all the way to warehouses
- Sloshing or spilling water may be a concern in an apartment. Ideal location is a garage or shed

Method and Materials

- ✓ Build or buy a system. Many YouTube videos and designs available online
- ✓ Mix nutrient media into water at recommended concentration
- ✓ Turn on lights and pump
- ✓ Start seeds in media trays, transplant to grow bed
- ✓ Water test weekly to replace nutrients
- ✓ Replace water when salts build up
- ✓ Continuous harvest and replant



Aquaponics

- Symbiotic System – Fish and plants benefit each other; fish waste fertilizes plants, and plants clean the water
- Water Efficient – Uses up to 90% less water than traditional farming
- No Soil Needed – Plants grow in water, reducing the risk of soil-borne diseases
- Requires Monitoring – pH, ammonia, and nutrient levels must be balanced for fish and plants
- Sustainable & Scalable – Can be adapted for small home systems or large commercial farms

Methods and Materials

- ✓ Choose a System Type – Decide between media beds, nutrient film technique (NFT), or deep water culture (DWC)
- ✓ Select Fish & Plants – Pick compatible fish (e.g., tilapia, trout) and plants (e.g., lettuce, herbs)
- ✓ Set Up Tanks & Grow Beds – Install a fish tank, water pump, and plant grow area
- ✓ Cycle the System – Establish beneficial bacteria to convert fish waste into plant nutrients
- ✓ Monitor & Maintain – Check water quality, feed fish, and adjust conditions as needed



Indoor mushroom growing

- Choose the Right Mushroom – Oyster, shiitake, and button mushrooms are great for beginners
- Controlled Environment – Requires proper humidity, temperature, and airflow
- Substrate Matters – Mushrooms grow on straw, sawdust, coffee grounds, or other organic materials
- Sterility is Key – Contamination can ruin the entire crop
- Patience Required – Mushrooms take weeks to grow and fruit

Materials and Methods

- ✓ Pick a Mushroom Type – Choose one suited for indoor growing
- ✓ Prepare the Substrate – Pasteurize or sterilize the growing medium
- ✓ Inoculate with Spores or Spawn – Mix mushroom spores or mycelium into the substrate
- ✓ Create the Right Environment – Maintain proper humidity, temperature, and darkness
- ✓ Wait & Harvest – After colonization, mist regularly and harvest when mushrooms mature

