**Seed Class Outline**

seeds

cuttings

**seeds**

early seeding methods

 cold frame/hot box

 clay jars > marginal success & labor intensive

 bell jars

 wood or styrofoam tents

 wall of water

for seeds to germinate

 water

 oxygen

 appropriate temperature @ 70 degrees

seeds are easy to store in original packets

**Timing is everything!** - see the back of the seed packets

open pollination - heirloom - non-hybrid

most frost tolerant plants - March 15 - 30

warm weather plants - Mother’s Day

**growing soil**

seed starting mix for germination

potting soil for transplants

do NOT use garden soil, mulch or compost for starting soil or first transplants

 garden soil turns hard, doesn’t drain, can contain disease and insects and weeds

seed starting or artificial soil

 peatmoss + vermiculite + perlite

 ph 4.5

don’t sterilize soil mixes

 Sunshine, Miracle Grow, Scotts

don’t use compost or potting soil to start seeds

 to heavy and contains bark

**temperature**

 most seeds germinate 65 - 75 degrees

 thermostat for heat mats

 no window sill for germination but transplants it is okay (okay after germination)

 to cold in the winter

**light**

some seeds need light to germinate, others no, some don’t care - read the packet

cool white flourescent T-5 bulbs - incandescent bulbs are too hot

most seeds fail to germinate because of improper light

not enough light makes seedlings leggy - never recover

get lights you can raise and lower

keep lights 2" above the plants - raise as seedlings grow

**planting**

fill containers with soil mix

cover large seeds with ¼" of mix

press small seeds

some don’t cover at all

**water**

gentle over misting - spray bottle - or bottom watering

**label everything!**

cover flats with a clear dome

no direct sunlight

remove dome as seeding are visible

keep at 60 - 70 degrees

peat pots are okay for strong root plants - cucumber, melons, squash NOT tomatoes and peppers

plug trays - no transplant shock

**cuttings**

hard woods - grapes, holly, raspberries, trees

 taken from woody dormant canes with no leaves, cut just below a node, 4" - 30" long

 (February - March)

 root side down

softwood - geraniums, forsythia, lilac, potentilla, viburnum, butterfly bush, lavender, coleus, lamium, roses

 taken from 4" - 6" of new growth with a few leaves, cut just below a node

use a sharp knife

needs humidity and warmth - plastic bag or dome of the top for humidity - bottomheat is best for warmth

rooting hormone or honey - do not use root simulator

roots in 5 - 6 weeks

keep soil moist