

Winter Garden 2B - Session 2 Syllabus

This session the students will learn what it takes to have a winter garden.

Lesson 1: Understanding California's Winter Climate Zones

Objective: Identify your local USDA Plant Hardiness Zone and microclimate.

- Topics:
 - California's major climate regions (Coastal, Inland, Central Valley, Desert, Mountain)
 - How winter affects each region differently
 - Using zone maps and frost dates
 - Microclimates (urban heat islands, shaded areas, wind pockets)

Activity: Use the USDA Zone Map to find your zone and first/last frost dates.

Lesson 2: Soil Preparation and Fertility

Objective: Build and maintain fertile soil for cool-season crops.

- Topics:
 - Amending with compost and organic matter
 - Cover cropping and green manure
 - Mulching to retain moisture and regulate temperature
 - Avoiding compacted soil during wetter months

Activity: Test your soil or create your own compost mix.

Lesson 3: What to Plant for flowers and vegetables for a Winter Garden

Objective: Select vegetables, herbs, and flowers that thrive in California winters.

- Topics:
 - Top winter crops: kale, broccoli, cabbage, spinach, peas, carrots, radishes, garlic, onions
 - Hardy herbs: cilantro, parsley, thyme, rosemary
 - Cold-tolerant flowers: pansies, violas, calendula

Activity: Make a planting calendar based on your zone and desired crops.

Lesson 4: Seed Starting and Transplanting Techniques

Objective: Learn when and how to start seeds or transplant winter crops.

- Topics:
 - Direct sowing vs. indoor seed starting
 - Using cold frames, cloches, or greenhouses
 - Transplanting tips for tender seedlings
 - Timing for staggered planting
 - bulbs

Activity: Start seeds indoors and sow a cold-hardy crop directly outdoors.

Lesson 5: Watering and Frost Protection

Objective: Manage moisture and protect crops from cold snaps.

- Topics:
 - Adjusting irrigation in cooler months (less evaporation, more rain)
 - Drip irrigation vs. hand watering
 - Frost protection: row covers, garden fabric, mulch, cold frames
 - Recognizing frost damage

Activity: Install row covers or mulch a planting area for protection.

Lesson 6: Pruning and Dormancy in Winter Gardening

Objective: Define Dormancy and the purpose of pruning and identify what plants we have and what they need.

- Topics
 - Understand what dormancy means in plants and why it happens in winter
 - Explain the purpose of pruning in the fall/winter
 - Identify the 3 D's: Dead, Diseased, and Damaged branches
 - Practice safe and proper pruning techniques

Lesson 7: Pest and Disease Management in Winter

Objective: Identify and control common winter pests and diseases.

- Topics:
 - Common winter pests: aphids, snails/slugs, cabbage worms
 - Fungal issues from excess moisture
 - Companion planting for pest deterrence
 - Organic treatment methods (Neem, diatomaceous earth, traps)

Activity: Set up a simple natural pest control system.

Lesson 8: Harvesting and Succession Planting

Objective: Harvest winter crops correctly and keep your garden producing.

- Topics:
 - Signs of readiness for harvest (leafy greens vs. root crops)
 - Continuous planting (succession planting for winter & early spring)
 - Storing harvested produce
 - Preparing for transition to spring planting

Activity: Harvest one crop and plant another in its place.