



# TriCounty Master Gardener Training Program Course Syllabus



## Spring 2019

This syllabus is online at the TriCounty Master Gardener Program Web site at: <https://mg.aces.edu/tricounty>. From there you may access the online handouts by clicking on the name in the listing under additional resources for each class.

If you have questions, contact us [tricountymastergardener@gmail.com](mailto:tricountymastergardener@gmail.com)

Most of the ANR online handouts may be found at [www.aces.edu](http://www.aces.edu). If your ACES search results show a fee for purchasing the information, that is only if you want it mailed to you. To print the handout, locate the PDF or HTML button, bring the file up on your computer and save to your computer or print.

**Orientation / January 31, 2019**

**Madison County Extension Office**

### ORIENTATION

#### Volunteer Opportunities

Guest Lecturer: [Rhonda Britton](#)

Presidents of Local Associations

#### Objectives

- Welcome to program
- Review schedules and program requirements
- Understand rights and responsibilities as a student in the program
- Meet program staff and class participants

**REQUIRED Reading Assignment for after Orientation:** Alabama Master Gardener Handbook, Chapter 1

#### Additional Resources Online:

- [Alabama Cooperative Extension System - Master Gardener Site](#)

#### IN CLASS Handouts:

- Soil Test Box (for Class 2)
- Soil Test Lab Sheet (for Class 2)
- [ANR 0006A Home Soil Testing: Taking a Sample](#)

**BASIC BOTANY/PLANT PHYSIOLOGY**

**Guest Lecturer:** [Dr. Rudy Pacumbaba](#)

**Objectives:**

- Review basic plant parts/structures and their functions in plant growth and development
- Understand relationship of photosynthesis and respiration to plant growth and development
- Identify the basic requirements for plant growth including the 12 essential elements
- Recognize the process by which plants absorb essential elements

**REQUIRED Reading Assignment for Basic Botany:**

- Alabama Master Gardener Handbook, Chapter 3
- [Plant Physiology in a Nutshell](#)

**SERVICE REPORT AND REGISTRATION  
HARVEST FOR HEALTH**

**Guest Lecturer:** [Deen Rice](#)

**Guest Lecturer:** [Acacia Moore](#)

**SOILS AND PLANT NUTRITION**

**Guest Lecturers:** [Dr. Charles Mitchell](#)  
[Rhonda Britton](#)

**Objectives:**

- Identify the five factors of soil formation
- Recognize the physical components of soil
- Be able to identify and explain the function of the elements essential to plant growth
- Recognize types of fertilizer and their appropriate uses

**REQUIRED Reading Assignment for Soils & Fertilizers:**

- Alabama Master Gardener Handbook, Chapter 2 pages 23-56; Chapter 9 pages 207-219
- [SOIL PRESENTATIONS AND HANDOUTS](#) by Dr. Mitchell online.

**Additional Resources for Soils & Fertilizers**

**ONLINE Handouts:**

- [ANR 0006B Home Soil Testing: Using the Soil Test Report](#)
- [ANR 0340 Soils of Alabama](#)
- [Something to Think About](#)

**VEGETABLE GARDENING/PRODUCTION**

Guest Lecturer: [Doug Chapman](#)

**Objectives:**

- Understand the basics of small scale vegetable gardening
- Understand planting schedules and fertilization
- Review methods of insect and disease control
- Learn harvesting and storage techniques

**REQUIRED Reading Assignment for Vegetables**

- Alabama Master Gardener Handbook, Chapter 12
- [ANR 1254 Crop Rotation: An Essential Part of Planning a Home Garden](#)

**Additional Resources for Vegetables**

- [ANR 0910 Common Insect and Disease Pests of Turfgrasses and Ornamentals](#)
- [ANR 0063 Planting Guide for Home Gardening in Alabama](#)
- [ANR 1345 Raised Bed Gardening](#)
- [ANR 1045 Garden Bugs: Insect Pest Management in the Home Vegetable Garden](#)
- [ANR 1422 Basics of Fall Vegetable Gardening](#)
- [ANR 1128 Weed Identification for Horticultural Crops](#)
- [ANR 0895 Tomato Disease Identification](#)
- [ANR 1423 Keys to Producing and Selecting Quality Vegetable Transplants](#)
- [ANR 1156 Guide to Commercial Staked Tomato Production in Alabama](#)
- [Tomato Variety List](#)
- [References for Vegetable Gardening](#)
- [ANR 0047 Alabama Gardener's Calendar](#)
- [Growing Vegetables Organically \(University of Ga\)](#)
- [Companion Planting](#)
- [ANR 0479 The Alabama Vegetable Gardener](#)

**LANDSCAPE DESIGN (Hands On)**  
**Class Extended One Hour**

**Guest Lecturer:** [Taylor Reeder](#)  
& Advanced Master Gardeners

**Objectives:**

- Gain an awareness of the basic principles of “good” landscape design
- Understand the process of analyzing a site to be landscaped
- Become familiar with the steps involved in developing a landscape design

**REQUIRED Reading Assignment for Landscape Design:**

- Alabama Master Gardener Handbook, Chapter 16
- [Principles of Landscape Design](#)

**Additional Resources for Landscape Design**

**ONLINE Handouts:**

- [ANR-0813 Residential Landscape Design](#)
- [Auburn University Landscape website](#)
- [Auburn University Landscape Plant Database](#)

**ENTOMOLOGY**

**Guest Lecturers:** [Dr. Ayanava Majumdar \(Dr. A\)](#)  
[Chris Becker](#)

**Objectives:**

- Learn to identify and control various types of common insects
- Become familiar with the principles of pesticide safety

**REQUIRED Reading Assignment for Entomology**

- Alabama Master Gardener Handbook, Chapter 4; Chapter 9, pages 197-201; Chapter 10, pages 283-289; Chapter 11, pages 323-329.

**Additional Resources for Entomology:**

**ONLINE Handouts:**

- [ANR 1042 Common Diseases and Insects Found in Landscape Settings](#)
- [ANR 1045 Garden Bugs: Insect Pest Management in the Home Vegetable Garden](#)
- [ANR 1289 What’s Buggin’ You?](#)
- [ACES Integrated Pest Management Information Center](#)

**PLANT PROPAGATION**

**And PROPAGATION STATIONS (Hands On)**

**Guest Lecturer:** [Dr. Rudy Pacumbaba](#)  
& Master Gardeners

**This is a hands-on class.** Bring your garden gloves. We will split into small groups to rotate through four learning stations. Experienced MGs will show you various types of propagation and you will practice some of them. You will keep what you plant, so bring a box in which to place your plants for transport. Wear comfortable shoes and dress for the weather.

**Objectives:**

- Be able to categorize methods of propagation as sexual or asexual
- Learn techniques and methods of vegetative propagation (asexual)
- Learn techniques and methods of propagation by seeds (sexual)

**REQUIRED Reading Assignment for Plant Propagation**

- Alabama Master Gardener Handbook, Chapter 7; Chapter 8, pages 160-161
- [This is Propagation](#)
- [Herbaceous Plant Propagation](#)

**Additional Resources for Propagation**

**ONLINE Handouts**

**CUTTINGS:** [Plant Propagation by Stem Cuttings: Instructions for the Home Gardener](#)

**CUTTINGS:** [Taking Stem Tip Cutting of Herbaceous Plants](#)

**CUTTINGS:** [Stem Cuttings - Soft Wood Cuttings](#)

**DIVISION:** [Plant Roots](#)

**DIVISION:** [Perennials, Division, Bulbs](#)

**DIVISION:** [Tips on Dividing Perennials from American Horticulture Society's Book](#)

**LAYERING:** [Layering \(NC State\) Instructions for the Home Gardener](#)

**LAYERING:** [Layering \(NC State\) Leaf, Cane, Root Cuttings](#)

**LAYERING:** [Budding and Grafting](#)

**SEEDS:** [Starting Your Own Plants from Seed](#)

**SEEDS:** [Starting Your Plants From Seeds \(NC State\)](#)

**SEEDS:** [Jump Start Your Seeds \(Fine Gardening\)](#)

**SEEDS:** [ANR 1061 Soil Temperature Conditions for Vegetable Seed Germination](#)

**SEEDS:** [Fine Gardening Plant Guide](#)

**SEEDS:** [Timely Tips on Starting Seedlings at Home \(Texas A&M\)](#)

**TRANSPLANTING:** [Transplanting & Thinning Flat & Pot Grown Seeds](#)

**TRANSPLANTING:** [ANR 1423 Keys to Producing and Selecting Quality Vegetable Transplants](#)

## TURFGRASS MAINTENANCE

Guest Lecturers: [Rhonda Britton](#)  
[Tim Crow](#)

### Objectives:

- Identify the varieties of lawn grasses recommended for our area
- Learn to evaluate them based on temperature tolerance, resilience, and amount of care required
- Learn basic techniques involved in establishing lawn grass
- Become familiar with the basic requirements for proper lawn maintenance

### **REQUIRED Reading Assignment for Lawns:**

- Alabama Master Gardener Handbook, Chapter 11

### Additional Resources:

#### ONLINE Handouts:

- [ANR 092 Selecting Turfgrasses for Home Lawns](#)
- [ANR 0910 Common Insect and Disease Pests of Turfgrasses and Ornamentals](#)
- [ANR 239 Home Lawn Maintenance](#)
- [IPM 590 Homeowner Lawns - Chemical Weed Control Recommendations for 2014](#)
- [IPM 1314 Homeowner Lawns, Insect Control - Alabama Pest Management Handbook 2013](#)
- [IPM 1292 Homeowner Lawns, Disease & Nematode Control](#)

## WEED MANAGEMENT

Guest Lecturer: [Tim Crow](#)

### Objectives

- Learn to identify and classify weeds
- Become familiar with the four general methods of weed control
- Understand the importance of proper selection of herbicides and safety procedures for their use

### **REQUIRED Reading Assignment for Weed Science:** Alabama Master Gardener Handbook, Chapter 6

### Additional Resources for Weed Science

#### ONLINE Handouts:

- [ANR 1128 Weed Identification for Horticultural Crops](#)
- [ANR 0854 Weed Control in Residential Landscape Plantings](#)
- [Auburn University Weed Identification](#)

**PLANT PATHOLGY**

**Guest Lecturer:** [Dr. Jim Jacobi](#)

**Objectives:**

- Learn to identify the major diseases of ornamental flowers, shrubs, and trees
- Acquire knowledge of techniques for diagnosing growth problems of ornamentals

**REQUIRED Reading Assignment for Plant Pathology:**

Alabama Master Gardener Handbook, Chapter 5; Chapter 9, pages 197-206; Chapter 10, pages 265-289  
[Diagnostic Chart for Plant Problems](#)

**Additional Resources for Plant Pathology**

- [Auburn University Plant Laboratory](#)
- [Birmingham Plant Diagnostic Laboratory](#)
- [ANR-0910 Common Insect and Disease Pests of Turf Grasses and Ornamentals in Alabama](#)
- [Crop Rotation Guideline for Landscapes](#)

**BACKYARD FRUIT PRODUCTION**

**Guest Lecturer:** [Mike Reeves](#)

**Objectives:**

- Identify the recommended varieties of small fruits for this growing zone
- Gain an awareness of the basic cultural practices for small fruits
- Become familiar with methods to identify and control insects and diseases in home orchards and on fruits & nuts.
- Learn basic pruning techniques

**REQUIRED Reading Assignment for Small Fruits & Nuts:** Alabama Master Gardener Handbook, Chapter 13

**ONLINE HANDOUT**

- [ANR 0053-A Fruit Culture in Alabama: Introduction](#)

**HELP DESK ORIENTATION**

**Guest Lecturer:** [TBA](#)

**TREES AND SHRUB PRUNING TECHNIQUES  
PLANTING (HANDS ON)**

**Guest Lecturer:** [Marcus Garner](#)

**Objectives**

- Become familiar with basic cultural practices relating to the planting and care of trees
- Understand the importance of proper site analysis and selection
- Learn to identify and control major diseases of trees
- Recognize types of trees successfully grown in this geographic region
- Learn appropriate basic pruning techniques

**REQUIRED Reading for Assignment for Trees and Pruning Techniques**

- Alabama Master Gardener Handbook, Chapter 9 pages 185-197; Chapter 10, pages 236-264
- [ANR 814 Street Trees](#)
- [ANR 509 A Key to Common Trees of Alabama](#)
- [Trees for All - Getting New Trees Started Right](#)
- [ANR 1255 Homeowner's Guide to Safer Trees \(book\)](#)

**PLANT SELECTION, CARE & GARDEN TOUR**

**Guest Lecturer:** [Harvey Cotten](#)

**Objectives:**

- Learn what to look for in a plant, *i.e.* growth habit and cultural requirements
- Obtain an overview of plants that perform well in our growing zone

**REQUIRED Reading Assignment for Plant Selection:**

Alabama Master Gardener Handbook, Chapter 3, pages 77-82, Chapter 9, pages 185-206, Chapter 10, 225-264

**Additional Resources for Plant Selection**

- Search [www.ACES.edu](http://www.ACES.edu) Web site for specific plants of interest *i.e.* boxwoods

**ONLINE Handouts:**

- [ANR 0258 Pruning Ornamental Plants](#)



**CONTAINER GARDENS, ANNUALS & PERENNIALS  
HERBS**

**Guest Lecturers:** [Allyson Shabel](#)

**Objectives:**

- Review the principles of color selection
- Identify the principles and demonstrate successful container gardening
- Learn the basics of herb gardening including varieties appropriate for our area
- Gain an awareness of growing, harvesting, and storage and use techniques
- Learn about the selection and care of annuals and perennials
- Become familiar with their growth habits and best cultural practices

**REQUIRED Reading Assignments**

- [ANR 1139 Container Gardening](#)
- Alabama Master Gardener Handbook, Chapter 14 and 15
- [HE-0605 Drying Herbs](#)
- [Some Suggested Herbs for North Alabama](#)
- [ANR 1037 Growing Herbs in Containers](#)
- [ANR 1164 Growing Herbs](#)

**Additional Resources**

**ONLINE Handouts:**

- [ANR 0566 Herbaceous Perennials in Alabama](#)
- [ANR 1071 Woodland Wildflowers: A Primer](#)
- [Container Gardening](#)

**BACKYARD WILDLIFE HABITAT**

**Guest Lecturer: [Herb Lewis](#)**

**Objectives:**

- Illustrate incorporating water into a backyard wildlife habitat
- Focus on the key element of flowing water
- Demonstrate associated benefits within a small backyard setting

**Additional Resources for Wildlife Habitat**

ONLINE Handouts

- [ANR 778 Attracting Wildlife to your Backyard](#)
- [ANR 785 Building Shelter For Wildlife](#)
- [Birds Eye View of the Garden](#)
- [Backyard Habitat References](#)
- *For the Birds*, U.S. Fish and Wildlife Services, March 2001, (<http://birds.fws.gov>)
- *Guide to Bird Behavior, Volume One*, Donald Stokes; Little Brown and Company, 1979.
- *The Practical Rock & Water Garden*, Peter Robinson, Hermes House, 2002
- *Garden Stone*, Barbara Pleasant, Story Books, Stone Publishing, 2002

**IN CLASS Handout:**

- Session Evaluation Form

**Post Test and Final Details**

**[Rhonda Britton](#)**