

Organic & Sustainable Agriculture and Food Courses 2012

Revised 1/9/12



For more info call (920) 498-5568 or e-mail valerie.dantoin@nwtc.edu

Organic agriculture and garden courses at NWTC are designed by a professional teacher and expert farmers and growers. The courses are taught in ways appealing to adult learners including discussions, guest lectures, on-farm visits, virtual farm/garden tours and hands-on practical activities. Catalog numbers are 10-090-1** (last 2 digits vary).

For on-line registration go to <http://www.nwtc.edu>, click on the orange “sign up” button near the top right hand side of the page. Select “register for a class” and then follow the instructions.

You can also **register for classes by calling** the Enrollment Services Department at (920) 498-5444 or toll-free at (888)385-NWTC.

10-090-111 ORGANIC AG – Practices and Issues (2 credits)

In this survey class, discover organic principles and the "systems" approach. What does it mean to be organic? Is it really that different from conventional production? What changes happen to soil and plant biology when we begin to treat the farm/garden as a whole instead of just parts? What differences do organic farming and gardening contribute to our health, to the environment, and to future generations compared to conventional agriculture? In this class, we also cover how to transition to organics, certification requirements and organic farm plans. We discuss the impact of GMOs (Genetically Modified Organisms), synthetic fertilizers, herbicides, antibiotics, and hormones. We debate the question of whether or not organic ag can feed the world.



10-090-102 ORGANIC SOILS, NUTRIENTS, COMPOSTING

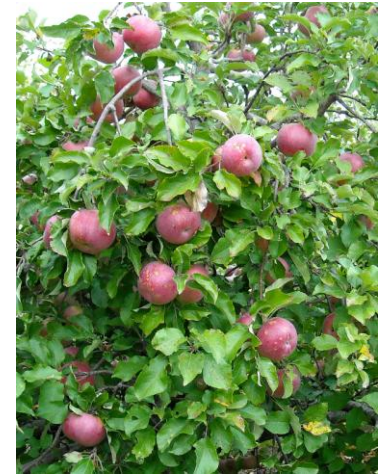
Functional soil is the foundation of organic systems. In this course we examine the characteristics of robust, healthy soil. We review important soil physical properties, as well as chemical and nutrient characteristics that are keys to successful organic farming and gardening. We discover soil biology and its heroic role cycling nutrients. We learn how the best farmers and gardeners build soil organic matter and how this single factor determines the likelihood of creating a sustainable, low cost operation. We learn how to take soil samples, get a soil test report, and interpret results. We explore composting techniques and learn why it is a “secret tool” of organic farmers and gardeners. We review nutrient cycling and discover organic fertilizer sources; what is approved, and what is not. We examine the role of soil amendments and products...are they worth it? Finally, we discuss manure, nutrient problems, soil erosion, and soil conservation programs. We fill out an actual soils section of a farm certification document.

10-090-103 ORGANIC AGRONOMIC CROPS In this course we compare organic field crop management to conventional cropping systems. We review the basic biology of plant families important in commercial agriculture and how biology is impacted by organic methods. We explore organic practices for choosing seed varieties, seedbed preparation, fertilizing, planting, weed, and pest control. We take an in-depth look at tools like cover cropping, crop rotations, green manures and composting. We create a transition cropping plan and evaluate alternative crops. You will also have the opportunity to investigate crops of special interest to you. We create a crop budget, evaluate yields, and examine marketing options. We fill out the actual cropping section of the organic certification paperwork.



10-090-104 ORGANIC RUMINANT LIVESTOCK How do we manage and care for ruminants without using concentrated feeds, synthetic hormones, antibiotics and other products? Topics we cover include; rumen function, illness prevention, reproduction, feeding (grazing & rations), housing, young stock, stress reduction, and the organic health care toolbox. Also covered; National Organic Program rules, organic standards, and livestock certification plans. We take a close look at dairy and beef cattle and also review other ruminant species according to class interest. We fill out the livestock section of the organic certification paperwork.

10-090-105 ORGANIC PRODUCE: FRUITS, VEGGIES, HERBS, BRAMBLES In this course we explore how organic production differs from conventional horticultural production. We will look at practices and products used by successful organic gardeners and orchardists. We review what to expect when transitioning to organics; the problems and pitfalls as well as the wonderful surprises. Students will discover how to control weeds and pests using organically approved methods and products. You will also have the opportunity to investigate plants of special interest to you. The class shares tips, tricks and suggestions with each other. Students have the opportunity to plan a garden, orchard, or food related enterprise and create a harvest and marketing plan. Students may fill out certification paperwork after examining standards and requirements. Whether gardening in your backyard or using commercial greenhouses and fields, discover and discuss the best organic practices to grow the best food ever.



10-090-106 ORGANIC SPECIALTY ANIMALS Explore alternative agricultural production and marketing methods for specialty animals like sheep, goats, swine, and fish. The face-to-face version of this course takes place at a variety of farms in Northeast Wisconsin that are raising specialty animals. This course helps students evaluate organic production practices and ideas by seeing them in action. If you have a few acres and want to see some specialty enterprises, then this course may be just right for you.

10-090-107 ORGANIC BUSINESSES & MARKETING. This course explores personal goals and readiness to create an entrepreneurial business related to food and agriculture. The business may be as “simple” as an organic farm or more complex with value-added products and services. We will plan for profit, and sustainability, not just production. We will examine enterprise budgets within businesses and discover profit centers. We will analyze marketing strategies (commodity, direct, value-added, etc.) and learn how to set prices to sell organic products. Finally, we will review standard financial statements and what they tell us about profitability done in a sustainable, ethical manner. You will get a look at elements of a typical business plan and have an opportunity to draft one of your own.

10-090-108 APPLIED ORGANIC ON-FARM MANAGEMENT (1 cr.) This course consists of individualized instruction suited to your farm or garden site and needs. The instructor typically visits your farm or land and helps work through your goals and questions. Some farmers have created an organic farm or transition plan. Some just want to survey their options and get feedback on the possibilities. Others want to take a hard look at existing operations and find ways of becoming more profitable. Instructors can help you evaluate your resources including time, money, and skills. They can help you create a plan to make your farm or garden profitable and sustainable. Some group-work with other students who have similar interests or enterprises is likely. This provides networking opportunities. Meeting times are flexible and can include evenings and may occur on a campus near your location.

10-090-109 MANAGED GRAZING (1 cr.) Managed grazing is a gateway practice required in organic livestock farming. This course takes the student through five topics in managed grazing: 1) **pasture plants**, seeding, fertility, management, and growth curves; 2) **animals** on pasture, movement, behaviors, feed intake, feed quality, animal health, and stocking density; 3) **fencing** plans, layout, components, costs, and quality; 4) **water systems**, tanks, lines, hydrants, irrigation, runoff, return on investment, and lanes; 5) the **whole plan**, why graze, profitability, LEAN principles, cost/benefit analysis, conservation issues, and financial programs further resources.

10-090-112 ORGANIC BACKYARD AG, Permaculture, Edible Landscapes. This course was created to meet a demand by people in urban and suburban areas to learn how they can grow their own groceries on their own household parcels. Besides growing food using perennials like elderberry, raspberries, herbs, and nut trees, we explore concepts where designs include beauty, water elements, pathways, and relaxation. Vermiculture, composting and other sustainable landscape principles are covered.



10-090-113 – ORGANIC POULTRY MANAGEMENT. In the first 4 weeks of the course, we examine bird biology, and uncover poultry facts and myths. Explore feed rations, housing and pen options, pastured poultry, backyard chickens - and the best breeds for the job. We will outline poultry diseases and how to keep birds healthy. We investigate local ordinances and where to buy birds. In the second half of the course, we look at commercial egg handling and meat birds. We explore butchering facilities. We develop budgets and look at business ideas that include other birds besides chickens. We develop a feasibility plan for a small-scale poultry operation.

10-090-114 – SMALL FARM MACHINERY & EQUIPMENT. *NEW in summer of 2012.* Explore the variety of equipment and small farm machinery that may help your operation. This course welcomes those who have very little experience with equipment. We will calibrate fertilizer spreaders, hook up a PTO and hydraulics, and find out how to ask smart questions before purchasing used tractors or implements. See what other tools growers throughout the region are using to make the work of organic farming more efficient and easier on the laborer.

Organic List of Classes at NWTC

Spring 2012 (Term# 2122)

Class	Class Title	Catalog #	Start – End Date	Days	Time	Fee
23610	Organic Soils, Nutrients, Composting	10-090-102	2/8 to 4/11		Online	132.25
23612	Organic Produce	10-090-105	1/12 to 3/8		Online	132.25
23531	Applied on Farm Mgmt	10-090-108	1/12 to 5/16		Flexible	124.70
23532	Organic Ag-Indpd Study	10-090-110	1/12 to 5/16		Flexible	166.20
25356	Organic Poultry	10-090-113	1/19 to 3/8	Thurs	3:30-5:45	124.10
27019	Organic Poultry non-credit	47-090-403	1/19 to 2/9	Thurs	3:30-5:45	22.14
27018	Organic Backyard Ag, Permaculture.	10-090-112	1/17 to 3/6	Tues	3:30-5:45	124.10

Each course listed above is one credit, except the non-credit poultry course.

Summer 2012 (Term# 2125)

Class	Class Title	Catalog #	Dates	Days	Time	Fee*
TBA	Organic Specialty Animals	10-090-106	6/14, 6/21, 6/28, 7/26, 8/02	Thurs	12:00-3:20 pm	124.70
	Managed Grazing	10-090-109	6/12, 6/19, 6/26, 7/24, 7/31	Tues	11:00 am -2:20 pm	124.70
	Applied on Farm Mgmt	10-090-108	Varies		Flexible	124.70
	Organic Ag-Indpd Study	10-090-110	varies		Flexible	166.20
	Small Farm Machinery & Equipment	10-090-114	6/13, 6/20, 6/27, 7/25, 8/01	Wed	3:00-6:20 pm	127.40

Fees are subject to change. All courses meet in Green Bay to start and may also meet on farms in Northeast Wisconsin.

Fall 2012 (Term# 2128)

Class	Class Title	Catalog #	Start – End Date	Days	Time	Fees	Instruction Mode
2 credits	Organic Ag; Issues & Practices	10-090-111	9/7/12 – 12/14/12	Fri	1:00 – 3:20 pm		In person
	Organic Soils, Nutrients, Composting	10-090-102	10/15/12 to 12/08/12				Online
	Organic Ag and Food Marketing	10-090-107	9/10/12 – 10/29/12				Online
	Applied Organic On Farm Management	10-090-108	9/10/12 - 12/14/12		Contact Instructor-		In person
	Organic Ag-Independent Study	10-090-110	9/10/12- 12/14/12		Contact Instructor-		In person

On-line learning includes tutorials for those new to this method of taking a class. Modules include discussion forums where ideas, experiences and information are exchanged between students. The instructor is available to answer questions via e-mail. Expect one-credit courses, whether on-line or in-person, to include one to two hours of homework or discussion each week.

Veterans' benefits can be applied to these courses.