

**Beneficial and Pest Organisms in the Garden**

Understand how to identify organisms in the home garden and learn how they can be beneficial or detrimental. Develop and integrate methods of conservation of beneficials and suppression of pest and disease organisms.

**Biofuels 101**

This course will focus on proper handling and use guidelines, basic chemistry of biofuels, production methods, and the social, environmental, and economic impacts of biofuels.

**Carpentry, Electrical, and Plumbing**

Students will learn the fundamentals of house construction/remodeling work, with an emphasis on sustainable and low impact building techniques. Topics include framing, cabinetry and trim, stairs, wiring, drain lines, NC building code, and hot/cold supply lines. *Instructor: Kevin Meehan*

**Field Study of Useful Plants**

Learn to identify plants and their uses. Have the opportunity to make teas, dry herbs, create liquid extracts, and other products from wondrous wild plants. *Instructor: Will Endres*

**Growing Organic Vegetables**

Learn the fundamentals of organic vegetable growing and get hands-on training in the most important skills involved. Grow, harvest, and utilize a variety of vegetables organically, and learn about irrigation installation and season extension structures. *Instructor: Doug Jones*

**Homebuilding 102**

Dry-in building topics include safety, ceiling/roof framing applications, roof finishes, windows, and exterior doors. Upon completion, students should be able to safely erect different roof types, properly install windows, exterior doors, and exterior finish materials.

**Intermediate Beer Brewing**

For beginning homebrewers who want to take their skills and knowledge to the next level. They'll refine their brewing process, begin designing their own beers, and explore in detail the main ingredients in beer (grain, hops, yeast and water).

**Intro to Photovoltaics (PV Solar Panels)**

Learn the concepts, tools, techniques, and materials needed to understand systems that convert solar energy into electricity with photovoltaic technologies. Topics include site analysis for system integration, building codes, and more! Students are eligible to sit for the NABCEP entry level certificate exam.

**Landscaping with Native Plants**

Learn to identify, appreciate, and utilize native plants in sustainable landscapes. Plant selection and propagation will enable acquisition of plant material. The necessity of having native plant material available for birds and wildlife will be examined.

**Local Edible and Medicinal Plants**

Meet, eat, and drink some of the abundant edible and medicinal plants growing wild in the NC Piedmont. This course covers identification, harvesting, preparation, and usage of foraged food and plant medicine. Celebrate the arrival of springtime exploring a variety of local environments in Chatham County. *Instructor: Kim Calhoun*

**Orchard Management: Focus on Pruning**

Hillary Heckler will lead students in proper winter pruning and plant management techniques for the health and success of perennial fruit crops. Course will include hands-on practice in the orchard on campus of CCCC.

**Permaculture Fundamentals**

Permaculture is the design of sustainable human habitats. Learn the fundamentals of permaculture systems design for forests, fields, permanent gardens, water, animals, buildings, economics, and society. *Instructor: Harvey Harman*

**PV for Electricians Series (Beginning)**

Learn concepts, tools, techniques, and materials needed to understand systems that convert solar energy into electricity with photovoltaic (PV) technologies. *Instructor: Tom Honey*

**Photovoltaic Technology & NEC Compliant Design**

Learn what electrical contractors, inspectors, and engineers need to know when designing, installing, and inspecting PV Systems for compliance with the 2014 NEC. Topics include: PV wire sizing, PV overcurrent protection, and more!

**Solar Thermal for Plumbers and Inspectors**

Want to add a new element to your plumbing business? Learn the basics of solar thermal technologies supplying hot water from the sun. An experienced plumber teaches this course focusing on both technical issues and code compliance.

**Solar Thermal Technology**

Examine heating techniques that come at the top of the pyramid for efficiency and practicality: solar and geothermal (ground-source heat pumps) for domestic water and home heating systems. Intro level NABCEP Exam.

**Starting a Winery, Brewery or Meadery**

This class will give you information on how to start a winery, brewery, or meadery in NC, including how to create a business plan, finances, state permits, and regulations, choosing a location, and much more. Must be 21 years of age.

**Using Native Plants in Landscape**

Learn current ideas about detrimental aspects of commonly planted non-native species (invasive species, pests, and diseases, resource requirements, and lack of diversity in the landscape) juxtaposed against the benefits of native species.

**Water Efficiency and Rain Gardens in the Landscape**

Learn about the significance of water in the ecosystem and its availability especially with consideration of climatic fluctuations. Learn to use the necessary tools and design approaches to allow for best use of available water resources.

*The Sustainable Living Series prepares members of the community to live a resource efficient lifestyle. Local experts will share their skills in green building, smart home design, and developing a vibrant local economy.*

### Introduction to Off-grid Homesteading

This course is planned to introduce students to homesteading concepts and provide the necessary background knowledge for purchasing land and creating an off-grid homestead. The course will be taught at a working off-grid homestead near Siler City.

### Little Houses: An Emerging and Sustainable Alternative

The Little House movement has come to Chatham County. Instructor Tim Watson will teach the important design considerations for a little house project. Topics include designing and planning for active and passive solar, rainwater harvesting, and landscape considerations.

### Social Enterprise: Building a Sustainable Local Economy

This class will provide an overview of alternative corporate structures, 4th Sector business approaches, cooperative enterprise, and "Benefit" (B) corporations. Serial entrepreneur Lyle Estill will survey the intersections of "People, Profits, and Planet," from a real world, experiential standpoint.

## SUSTAINABLE AND SUSTAINABLE LIVING SERIES

Course Name	Course #	Hours	Start - End Dates	Day(s)	Time	Cost	Location	City	Building
<b>CHATHAM COUNTY</b>									
Biofuels 101	1261	48	1/14 - 5/6	W	2:00p - 5:00p	125.55	PMC	Pittsboro	Pittsboro Main Campus
Carpentry, Electrical, and Plumbing	1766	24	1/20 - 4/7	T	7:00p - 9:00p	70.55	PMC	Pittsboro	Bldg 45 Rm 135
Field Study of Useful Plants	1772	56	3/11 - 4/29	W	9:00a - 4:30p	180.55	PMC	Pittsboro	Bldg 45 Rm 135
Growing Organic Vegetables	1769	24	3/4 - 4/22	W	6:00p - 9:00p	70.55	PMC	Pittsboro	Bldg 45 Rm 135
Homebuilding 102	1706	96	1/16 - 5/8	F	9:00a - 4:00p	180.55	PMC	Pittsboro	Bldg 45 Rm 134
Intermediate Beer Brewing	1260	12	4/4 - 5/2	Sa	12:00p - 2:00p	70.55	PMC	Pittsboro	Bldg 45
Introduction to Off-Grid Homesteading	1256	20	4/1 - 4/25	WSa	6:00p - 9:00p	70.55	PMC	Pittsboro	Offsite
Intro to Photovoltaics (PV Solar Panels)	1707	80	1/13 - 5/5	T	9:00a - 2:00p	180.55	PMC	Pittsboro	Bldg 45 Rm 134
Landscaping with Native Plants	1742	24	3/11 - 4/29	W	9:00a - 12:00p	125.55	PMC	Pittsboro	Bldg 42 Rm 103G
Little Houses: An Emerging & Sustainable Alternative	1708	8	3/4 - 3/25	W	6:00p - 8:00p	70.55	PMC	Pittsboro	Pittsboro Main Campus
Local Edible and Medicinal Plants	1767	24	3/10 - 4/28	T	1:00p - 4:00p	70.55	PMC	Pittsboro	Bldg 45 Rm 136
Local Edible and Medicinal Plants	1768	24	3/12 - 4/30	Th	5:00p - 8:00p	70.55	PMC	Pittsboro	Bldg 45 Rm 135
Orchard Management: Focus on Pruning	1770	18	1/21 - 2/25	W	3:30p - 6:30p	70.55	PMC	Pittsboro	Bldg 45 Rm 135
Permaculture Fundamentals	1771	56	1/29 - 4/2	Th	5:30p - 9:30p	180.55	PMC	Pittsboro	Bldg 45 Rm 134
PV for Electricians Series (Beginning)	1709	8	2/19/15	Th	8:00a - 5:00p	150.55	PMC	Pittsboro	Bldg 45 Rm 139
PV for Electricians Series (Beginning)	1710	8	3/19/15	Th	8:00a - 5:00p	150.55	PMC	Pittsboro	Bldg 45 Rm 139
PV for Electricians Series (Beginning)	1711	8	4/23/15	Th	8:00a - 5:00p	150.55	PMC	Pittsboro	Bldg 45 Rm 139
Photovoltaic Tech & NEC Compliant Design	1712	8	2/20/15	F	8:00a - 5:00p	150.55	PMC	Pittsboro	Bldg 45 Rm 140
Photovoltaic Tech & NEC Compliant Design	1713	8	3/20/15	F	8:00a - 5:00p	150.55	PMC	Pittsboro	Bldg 45 Rm 140
Photovoltaic Tech & NEC Compliant Design	1714	8	4/24/15	F	8:00a - 5:00p	150.55	PMC	Pittsboro	Bldg 45 Rm 140
Social Enterprise: Building a Sustainable Local Economy	1259	6	1/13 - 2/3	T	6:00p - 7:30p	70.55	PMC	Pittsboro	Pittsboro Main Campus
Solar Thermal for Plumbers and Inspectors	1258	8	3/5 - 3/26	Th	6:30p - 8:30p	70.55	PMC	Pittsboro	Bldg 45 Rm 139
Solar Thermal Technology	1257	64	1/13 - 5/12	T	2:30p - 6:30p	180.55	PMC	Pittsboro	Bldg 45 Rm 138
Starting a Winery, Brewery or Meadery	1289	6	3/28/15	Sa	9:00a - 4:00p	56.25	PMC	Pittsboro	Bldg 45 Rm 139
<b>LEE COUNTY</b>									
Using Native Plants in Landscape	1190	2	3/24/15	T	6:00p - 8:00p	13.55	WBW	Sanford	Main Bldg Rm 215
Beneficial and Pest Organisms in the Garden	1189	2	2/24/15	T	6:00p - 8:00p	13.55	WBW	Sanford	Main Bldg Rm 215
Water Efficiency and Rain Gardens in the Landscape	1205	2	4/21/15	T	6:00p - 8:00p	13.55	WBW	Sanford	Main Bldg Rm 215