



# The Basics of Organic Food Production

Dr. Elaine Solowey

3 weekly lecture hours, 3 credits. Undergraduate

## Course description

The purpose of this course is to present information about small scale organic food production, its potential and its problems. In this course we will explore the social and economic aspects of producing one's own organic food and engage students in practicing soil enrichment techniques, composting and vermin-composting, container gardening and keeping small livestock as well as seed saving, food storage, food preparation, slow food movements and the active preservation of heirloom fruits vegetables and animal breeds.

The semester includes a guest lectures and workshops on building greenhouses, cloches and chicken coops.

## Grade components:

Final exam 40%

Project 35%

Students choose an aspect of organic food production to investigate independently, presenting at the end of the semester a report or demonstration project with a written component.

Assignments 20%

Attendance 5%

Students build and keep compost piles, plan and plant a garden, practice mulching, learning basic pruning techniques, construct a greenhouse from scrap material and design a chicken coop

## Lesson One

### Course Introduction and issues

Dr Elaine Solowey

Growing food is only half of the process.....

Oldest Prepared foods...what came first, bread or cheese?

## Lesson Two

### Gardens

Kingsolver, Barbara. Animal, Vegetable, Miracle, The Year of Eating Local, 2009

Logsdon, Gene. The Economics of Small Scale Grain Production.2009

Hands on in the garden

Assignment -what do you want to grow in your vegetable garden?

### **Lesson Three**

#### **Bringing Food Production Back Home**

Dr Elaine Solowey

Readings: The staff of Life? Bread making and use.

Astyck, Sharon. How Much Did the Green Revolution Matter? Energy Bulletin Jan. 7, 2007

### **Lesson Four**

Rogers and Alexander. Saving Seeds, How Gardeners Protect and Preserve Seed Diversity, Storey Publications 1991

Hands on in garden

Assignment: A seasonal garden or all year around?

### **Lesson Five**

#### **3: Good Food Starts with Good Soil**

Dr Elaine Solowey

Readings. Jeavons J. The Intensive French Method of Growing Vegetables, What about containers?

Adapting to your area: 3 methods, which is for you?

### **Lesson Six**

#### **CSAs, Seed Saving and Agricultural Diversity**

Dr Elaine Solowey

Readings: Altieri, Miguel. The Ecological Impacts of Industrial Agriculture, 197-199, Fatal Harvest, Island Press, Corvelo, 2002

Hands on

How do we save seeds?

### **Lesson Seven**

Breeding your own vegetables, possible?

### **Lesson Eight**

#### **Urban Gardening and Community Gardens**

Dr Elaine Solowey

Readings:

Astyck, Sharon. What the Victory Gardens Produced, Depletion and Abundance, New Society Publishers, 2009

*Compost piles hands on in the garden*

### **Lesson Nine**

Campbell, Stu. Let It Rot! Composting and Vermiculture for Successful Gardens, Storey Publications 1998

Assignment: very small livestock

## **Lesson Ten**

### **Trees**

Dr Elaine Solowey

Readings: Smith, J. Russel. *Tree Crops, A Permanent Agriculture*, pages 3-19, Harper and Row, San Francisco, 1950

*Hands on in the garden*

Assignment: Do I have room in my garden for trees?

## **Lesson Eleven**

Readings: Solowey, Elaine. *Small Steps towards Abundance*, Chapter 3 Broadening the Base of the Pyramid, Thistle Syndicate/Bibliobooks, Acco, Israel, 2003

## **Lesson Twelve: Wise Agriculture**

Dr Elaine Solowey

Readings: Sauerkraut and Kimchi, traditional ways to achieve high vitamin food.

*Hands on in garden*

Assignment: How to plant a tree

## **Lesson Thirteen**

Luttman, Gail and Rick. *Chickens in Your Backyard*, Rodale Press 1976

Flottum, Kim. *The Backyard Beekeeper*, Rock Publications 2005

Assignment: Two kinds of hives

## **Lesson Fourteen **Field Trip to Kibbutz Neot Semadar****

## **Lesson Fifteen**

### **Permaculture, Biomimicry and the One Straw Revolution**

#### **Edible Landscapes**

Dr Elaine Solowey

Taking a page from Bill Mollison

Is permaculture a possibility?

Kingsolver, Barbara. *The First Month of spring, Animal, Vegetable, Miracle*, Harper Perennial, 2008

Mollison, Bill. *Permaculture*, Chapter 8, Urban and Country Strategies, Quantus Press, Cairns, 2000

Assignment: Harvesting from wild zones. Is there something to eat even down here?

## **Lesson Sixteen**

### **Hike to organic orchards**

Dr Elaine Solowey

### **Lesson Seventeen**

#### **Chickens in the Backyard-How animals can make your food garden more productive**

Dr Elaine Solowey

Readings: Flottum, Kim *The Backyard Beekeeper*, Rock publications, 2005

Luttman, Rick and Gail, *Chickens in the Backyard*, 1976 Rodale Press

**Assignment: What can chickens do for me?**

**Design a coop**

### **Lesson Eighteen**

#### **Sustainable agriculture: cultivating rural/urban linkages**

Dr Elaine Solowey

Readings: Wendell, Berry. *The Unsettling of America*

Barbara Kingsolver, *A Matter of Motherhood-raising an Heirloom Breed*, Animal, Vegetable, Miracle, Harper Perennial, 2008

**Assignment: Growing what is legal to grow**

### **Lesson Nineteen**

#### **Extending the growing season (Greenhouses cloches row covers shade houses and active mulching)**

Dr Elaine Solowey

Readings: Freeman and Bellaca, *Building Your Own Greenhouse*, Stackploe Books 1992

*Hands on in garden*

**Assignment: Is a greenhouse something I need?**

### **Lesson Twenty**

#### **Food from the Garden throughout the year; Workshop on drying, freezing canning, root cellars and other storage methods**

Dr Elaine Solowey

Readings: Green, Janet, *Putting Food By 1992*, A Plume Book

Costenbader, Carol. *On Preserving the Harvest*, Storey 1992

**Assignment: Let's dry some food**

### **Lesson Twenty One**

Dr Elaine Solowey

**Treasures in the Backyard, Small Steps Towards Abundance**, 2003

Berry, Wendell. *Hope*, pages 373 and 374, *Fatal Harvest*, Island press, Corvelo, 2002

**Are there local plants I should add to my garden?**

### **Lesson Twenty two**

**Integrating larger livestock** Goats from the *Homesteading handbooks* by Gehring Abigail

**Assignment: Design a goat pen, think of cows or other dairy livestock**

### **Lesson Twenty Three**

**Review**

## Lesson Twenty Four Student Presentations

## Lesson Twenty five Student Presentations

## Final Exam

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### Required Readings:

- Ableman, Michael, **Urban Agriculture**, pages 357- 360, Fatal Harvest, Island Press, Corvelo, 2002
- Mittal, Anuradha, **The Growing Epidemic of Hunger in a World of Plenty**, pages 303-305, Fatal Harvest, Island Press, Corvelo, 2002
- Astyck, Sharon, **How Much Did the Green Revolution Matter?** Energy Bulletin Jan. 7, 2007
- Astyck, Sharon **What the Victory Gardens Produced**, Depletion and Abundance, 2009
- Berry, Wendell, **The Gift of Good Land**,, Chapter 5, Chapter, 7 and Chapter 8 ,North Point Press, San Francisco, 1984
- Berry, Wendell, **Hope**, pages 373 and 374, Fatal Harvest, Island Press, Corvelo, 2002
- Campbell, Stu, **Let It Rot, The Gardener's Guide to Composting** Storey Publications, 1998
- Costenbader, Carol, **On Preserving the Harvest**, Storey 1992
- Flottum, Kim **The Backyard Beekeeper**, Rock publications, 2005
- Freeman and Bellaca, **Building Your Own Greenhouse**, Stackploe Books 1992
- Green, Janet, **Putting Food By** 1992, A Plume Book
- Gehring Abigail Goats Skyhorse Publishing 2011
- Goering, Norton-Hodge and Page, Chapter 11 and 12, **From the Ground Up**, Zed Books, New York, 1993
- Jeavons, John, **How to Grow More Vegetables...Ten** Speed Press, 2006
- Kingsolver, Barbara, **Animal, Vegetable, Miracle**, Harperperennial, 2008
- Kirchenmen, Frederick, Fatal Harvest, pages 91 -95 **Scale Does it Matter?** Island Press, Corvelo, 2002
- Logsdon, Gene **Small Scale Grain Production**, revised 2009, WorthIt Publications
- Luttman, Rick and Gail, **Chickens In the Backyard**, 1976 Rodale Press
- Mollison, Bill, **Permaculture**, Chapter 8, Urban and Country Strategies, Quantus Press, Cairns, 2000
- Nabhan, Gary, **Enduring Seeds** Chapter 6, New Ways of Saving, North Point Press, San Francisco, 1989
- Pollen, Michael **All Flesh is Grass** from The Omnivore's Dilemma, Penguin, 2006
- Rogers and Alexander Saving Seeds, How Gardeners Protect and Preserve Seed Diversity, Storey Publications 1991
- Salatin Joseph **Pastured Poultry Profits**, Dunaway Paperbacks 1996
- Solowey, Elaine, **Small Steps Towards Abundance**, Chapter 3 Broadening the Base of the Pyramid, Treasures In the Backyard, Thistle Syndicate/Bibliobooks, Acco, Israel,2003
- Smith, J. Russel, **Tree Crops, A Permanent Agriculture**, pages 3-19, Harper and Row, San Francisco, 1950