

OL 301 Assignment Three Homework Instructions

Online Learning: OL 301

Learn How to Grow a Family Vegetable Garden

Center for Sustainable Development

<https://nonprofit.csd-i.org/learn-how-to-grow-a-family-vegetable-garden/>

How You Can Grow a Vegetable Garden: Fresh, nutritious vegetables for your family.

This week's resources on the Student Resource Page:

<https://nonprofit.csd-i.org/301-student-resource-page/>

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OL 301 Assignment 3 Discussion

Manure in the Home Garden

OSU Nitrogen-Phosphorus-Potassium Values Of Organic Fertilizers

UGA How to Convert an Inorganic Fertilizer Recommendation to an Organic One

IDEP 4 Healthy Soil.pdf

[How to Grow More Vegetables](#) Than You Ever Thought Possible on Less Land Than You Can Imagine. John Jeavons

[The Vegetable Gardener's Bible](#) – Edward C. Smith

Assignment 3. Soil Part One: Soft open texture, nutrients—and the importance of worms for making compost!

Select healthy amendments. What kind of soil amendments? Where to get them?

This Week's Goal: Choose the soil amendments that you want to use and get enough to make one planting bed.

Step One. In this assignment we will be looking for and acquiring soil amendments for your first garden bed. So the first step is to explore what's available to you and depending on the size of your garden area what is the quantity of soil amendments that you will need.

So read through the discussion and look at the different kinds of soil amendments being used. Decide if you would like to use any of these—and if so—which ones.

If you're used to using commercial fertilizers you can use one of the resources above to find conversion instructions on how to use equivalent organic amendments instead.

Let's face it: dirt will work fine for your first garden bed. However, that said, adding soil amendments to your garden bed can improve the soil's structure and levels of nutrients for your vegetables.

Typically, one would have a compost heap that can provide you with compost for adding into your soil. Since you're just getting started with vegetable gardening you may not have a compost pile. A good thing to do right now would be to start a compost pile today so that you will have compost for the next growing season.

But for today, you need to survey what you have available to add to your soil when you begin digging your bed next week. Any type of organic material will work well in increasing the health of your soil. So if there are some fall leaves still beneath your trees, if you have some garden trimmings from recent garden work, or you can ask neighbors to save kitchen compost for you—all of these things will be highly beneficial for your soil. You may have a friend who's a gardener and could let you have a couple of buckets of their compost.

However, if you want to get some nutrients into your soil as well (significantly nitrogen at this early stage) you may want to invest in some manure: horse, cow, worm or chicken—you choose! Ask gardening friends if they know of a source for manure. The city or county that you live in may have an agricultural or vegetable gardening page on their website that could list potential sources.

If you can afford it, your local garden center or building supply center probably has bagged compost and manure. You probably won't need very much for your first garden bed. A nice thing about purchasing amendments at a nursery or building supply center is that it will likely be sterilized—which means that it won't have weed seeds in it.

So a simple thing to do is to go to a garden center and look for bags that are the appropriate size and determine what the costs will be. So how much manure should you use? If you purchased bagged composted manure, the label on the package will tell you the nutrient content and application rates. The chart below will help too.

This site has the accompanying chart:

<https://hort.extension.wisc.edu/articles/using-manure-in-the-home-garden/>

Suggested rates of fresh manure or compost to apply to supply about 0.2 lb of available nitrogen per 100 square feet:

Manure type		pounds to apply per 100 square feet
Dairy cow	no bedding	75
	with bedding	95
	composted	200
Sheep	no bedding	40
	with bedding	50
Poultry	no litter	20
	with bedding	30
	composted	70
Horse	with bedding	65

A 5 gallon bucket holds about 25 lbs of fresh manure or compost, so you can estimate how much to use without actually weighing the materials. For example, use three buckets full of dairy manure without bedding spread over a 10 by 10 foot garden to add 0.2 pounds of available nitrogen. You'd need to add 8 buckets of composted cow manure over the same size area to apply the same amount of nitrogen.

In Depth Resources:

1. Another good source is "Joe the gardener". In this episode he talks about building raised beds and adding soil amendments offering different ideas and good advice:

<https://joegardener.com/podcast/raised-bed-gardening-pt-2/>

2. Ed Smith in the Vegetable Gardener's Bible suggests: Loosen the soil deeply (see page 31) and work about 2 inches of well-rotted manure or compost into the soil (p. 49).

In Chapter 6 "Nurturing Vegetable-Friendly Soil" he gives a very good discussion on soil amendments (p. 238).

3. In John Jeavons's How to Grow More Vegetables, he gives a great overview of soil and amendments—and building garden beds in Chapters 2, 3, 4.

Step Two. Get the soil amendments to your house for next week's assignment on digging your first bed. So by now you will have chosen a source for manure, or a friend with a compost pile, or a garden center which can provide you with bags of manure or compost. So your job this week is to simply get it to your garden.

Finally, start small and keep it simple. You can learn more and more about improving your soil over several growing seasons. So this week, for your very first vegetable bed, just try to get compost or manure incorporated into the soil as you dig the bed. That should be enough to get you going growing some vegetables.

Homework for Assignment 3. So your assignment for week three is to write me and tell me briefly:

1. What is your best opportunity for acquiring soil amendments for your vegetable garden? What type of soil amendment have you chosen to use? What quantity of soil amendment will you need for your first garden bed?

2. Figure out how to get the soil amendments from the source to your garden. If this is going to be too complex for your first bed—don't worry about it—we can just go for the dirt you have available and you will be fine.

3. Choose three or four kinds of quick to germinate seeds that you bought last week and plant them in a strip of soil, a container or two, or some seed trays. This way, you'll have the excitement of watching them germinate and grow during the duration of this course and you'll have something to show for your work.

4.

Time to use your notebook! Print out this homework sheet and jot down a few things that maybe you had trouble doing and that you will need to remember when the next growing season rolls around.

I look forward to seeing your ideas for Assignment 3 and I look forward to seeing you next week in Assignment 4.