

STUDY GUIDE

FARMING & GARDENING VERTICALLY

S H O R T C O U R S E

HOW TO WORK THROUGH THIS COURSE

Over the following pages, you will move through a logical, self-paced learning experience that can enlighten and educate you on Farming and Gardening Vertically.

It is important from the outset to understand that learning about something is not the same as just reading about it. Learning implies a permanent change in what you know and can do.

Anyone can read a book and understand it; but for most people the detail of what you read is largely forgotten.

Reading something once only puts information into short-term memory. It is soon lost if you don't 'work' on it. Studying the same information takes longer, but by thinking about it and processing it you can transfer that information to long-term memory. This way, you will enhance your ability to recall and apply that information for years to come. If you take your time to work through the 7 lessons that follow, you will learn.

HOW DOES THIS COURSE WORK?

WATCH THIS VIDEO FIRST

<https://vimeo.com/441179158>

Read, Reflect, Research, Revise

Throughout the following pages, you will find not only things to read about, but also things to do:

1. Throughout each lesson, there are suggestions of things to do under the headings "Learn More". These are all sorts of ideas about things you can do in order to explore the subject further.
2. At the end of each lesson, there are Lesson Review Questions for you to undertake. When you click on this, your computer needs to be online. You will be taken to our cloud-based online school. The answers you choose will be evaluated immediately, and your results can be seen on completion of each test. You can return and repeat tests if you wish.

Undertaking these tasks will involve reflection, research and revision of the topics you read about. By repeatedly encountering each topic in different ways, your perspective on each subject will broaden, and the commitment of information to longer term memory will strengthen.

You don't need to undertake all of the suggested tasks if you don't want to; but we strongly recommend that you do some in each lesson, and that you answer all of the Lesson Review Questions.

The more time you spend doing these things, the stronger your learning will be.

Completing the Course

After completing all 7 lessons you will be presented with a final set of Lesson Review Questions which can also be undertaken online.

Do not attempt to do this until you have worked through all 7 lessons, and feel like you have learnt the subject well.

Upon finishing this final assessment you will immediately see your final results, and you can save a pdf copy of those results as a "Certificate of Completion".

Welcome Audio

Click the button below to listen to the welcome audio for this course. This feature is supported by most computers and some mobile devices.



THE CONTENTS OF THE COURSE

How to work through this course.....	2
LESSON 1 NATURE AND SCOPE OF VERTICAL GROWING	8
Nature of vertical growing.....	8
Green walls.....	8
Green facades.....	10
Crop production.....	11
Scope of vertical growing	11
The uniqueness of vertical gardening.....	11
Where to grow.....	13
How to grow.....	13
Benefits of vertical gardening.....	14
Mental wellbeing.....	14
Physical health.....	16
Environment.....	18
Food production.....	20
Reasons to create a green wall.....	21
Understanding biophobia.....	21
Health problems of biophobic design.....	22
Review what you have been learning.....	23
LESSON 2 BUILDING THE GREEN WALL	24
The living wall	24
Design and construction of green walls.....	25
Hydroponic systems.....	27
Loose media/substrate systems.....	28
Fixed media systems.....	30
Mat media.....	30
Sheet media.....	30

Customising	32
Waterproofing walls.....	32
Weight loading.....	34
Irrigation.....	35
Drainage.....	36
Lighting.....	37
Nutrition.....	38
Other design considerations.....	39
Green wall design	40
Design considerations.....	41
LESSON 3 GREEN FACADES: CLIMBERS, WINDOW BOXES, BASKETS AND EPIPHYTES	43
The green facade.....	43
Options for creating green facades.....	44
Some techniques in detail.....	46
Climbing plants	46
Hanging baskets.....	52
Window boxes.....	53
Epiphytes.....	55
Espaliers.....	56
Growing plants on trellis.....	57
Hedges.....	57
Wall shrubs.....	59
Green facade preparation.....	60
More on epiphytes	60
Succulents in green walls.....	61
LESSON 4 VERTICAL FOOD PRODUCTION	64
Making use of vertical crop growing.....	65
Hydroponics.....	66
NFT systems.....	66
Alternative layouts for vertical NFT systems.....	68

NFT system choices	68
Aeroponics.....	70
Gravel and loose culture.....	71
Aquaponics.....	71
Mushroom farms.....	73
Upright systems.....	74
Growing in protective structures.....	75
Greenhouse hydroponics.....	76
Design considerations.....	77
Temperature.....	77
Relative humidity and vapour pressure deficit.....	78
CO ₂ and O ₂	80
Water.....	81
Plant nutrients.....	81
Control of the environment.....	82
Artificial lighting.....	82
Outdoor vertical food gardens.....	83
Growing cucurbits in vertical systems.....	86
Cultural methods.....	86
LESSON 5 AUTOMATION	89
The need for automation.....	89
Automated systems.....	91
Irrigation and fertiliser.....	92
Automated irrigation systems for green walls.....	92
Fertigation of green walls.....	94
Monitoring vertical growing systems.....	96
Optimum air quality.....	96
Drone inspections.....	96
Cation exchange capacity.....	96
Measuring ec levels.....	97

Measuring ph levels.....	99
Automated irrigation of hydroponic green walls.....	102
Ph tests for hydroponics.....	102
Ec testing.....	102
Automatic ec and ph testing and control.....	102
Irrigation pumps.....	103
LESSON 6 MAINTENANCE.....	105
The range of maintenance tasks.....	106
Inspection tasks.....	106
Maintenance tasks.....	107
Maintenance of plants.....	108
The nature of plants	108
Watering climbers	109
Feeding	109
Mulching.....	109
Pruning and rejuvenating plants.....	110
Maintaining plants in containers	123
Watering.....	123
Feeding.....	124
Re-potting	124
Maintenance of hanging baskets.....	125
Problems with containers	125
Maintenance of hard landscape components	126
Maintaining plant health.....	128
Symptoms and diagnosis	128
How to conduct an inspection.....	129
Symptoms of nutrient deficiency.....	132
Pests and diseases problems.....	134
Occupational health and safety.....	135
Duty of care	135

Risk assessment	136
Identifying hazards and risk.....	136
Example of a risk assessment procedure.....	139
Work place safety.....	142
Safety with tools and equipment.....	144
General safety rules.....	144
Maintaining vertical gardens and farms.....	146
Maintenance issues when retrofitting green walls	147
Avoiding problem materials which increase maintenance.....	147
LESSON 7 PLANT SELECTION	149
Planting considerations.....	149
Plants for green walls.....	150
Plants for green facades	152
Climbers to grow on trellis.....	153
Wall shrubs.....	155
Plants for hanging baskets.....	157
Plants for window boxes.....	157
Plants for hedging.....	158
Plants for vertical farms	159
Growing strawberries in vertical farms.....	162
Organic of cultivation of strawberries in green wall containers.....	162

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LESSON 1 NATURE AND SCOPE OF VERTICAL GROWING

Vertical growing takes on many different forms including green walls and facades through to productive systems such as those found in hydroponics and vertical farming. Some of these are concerned with aesthetics by beautifying a street or building, others emphasise the health benefits of green spaces like green walls located in and around hospitals and care homes, and there are those which are primarily concerned with making the most use of restricted space to grow food. Whatever the purpose, vertical growing or gardening is now something most people are aware of.

NATURE OF VERTICAL GROWING

When it comes to enhancing buildings with greenery, a distinction is often drawn between green walls and green facades. Here, we'll describe what each of these entails, but the reality is that often these terms are used interchangeably, and many designers and installers of green walls don't make these distinctions. If you think more broadly in terms of vertical growing or vertical gardening, then any means of sustaining plants upwards can be included.

Green Walls

Green walls used to be something of a novelty and perhaps whilst greeted with curiosity, they were often considered to be difficult to install and maintain. With advances in technology and an array of possible installation options, they are more commonplace. In recent times, they are also becoming part of building design

and their many benefits to people and the environment are now recognised.



Mass planting of one species of plant is used to great effect here with a section of wall softened using a large leaved plant.

A green wall is a wall which is totally or partially covered with plants which are growing in soil, or some sort of substrate, which is also incorporated into the wall. Where the growing medium is loose it is housed in some sort of container, like bags, which are fixed directly to the wall, are part of the wall's structure, or which are supported by frameworks which are separate

from the wall but often anchored to it. If a substrate is used it can be in the form of mats (e.g. coir), sheets (e.g. polyurethane), or blocks which are manufactured to size to fit a particular wall. In most situations green walls have some sort of irrigation system hooked up to them since it is difficult to water the plants higher up.



Different layers and textures of plants can be used to create greater depth in a green wall.

Green walls may also be called 'living walls' since the plants are actively growing on the wall. They are also called 'vertical gardens'. However, green walls are not the same thing as vertical farming which is a means of growing produce usually inside a large structure such as a greenhouse or some other building e.g. a disused industrial building. That said, many owners of green walls may choose to include food plants as part of a green wall especially where there is limited space, or no other garden space, to grow fruit and vegetables.

Although most green walls are on the outside of buildings, they can also be on inside walls. The foyers of large hotels, high rise apartments and commercial offices offer potential for these types of inner green walls since they are often spacious and bright which allows good access for maintenance as well as more suitable environmental conditions for plants in the way of better ventilation and natural light.

Suggested Tasks: ▼

Throughout this course you will be provided with suggested tasks and reading to aid with your understanding. These will appear in the right hand column. Remember: these tasks are optional. The more you complete, the more you will learn, but in order to complete the course in 20 hours you will need to manage your time well. We suggest you spend about 10 minutes on each task you attempt, and no more than 20 minutes.

LEARN MORE >>>

Suggested Tasks

Take a walk or drive around your local neighbourhood or your nearest town. Look for examples of green walls. Consider the following:

- Are they aesthetically pleasing?
- Do the plants look healthy?
- Had you noticed them before you went looking for them?