



# Horticulture Curriculum

## Aims

The purpose of teaching horticulture is to give students insight into and understanding of where food comes from and, as coined, from farm to table. Students must have the opportunity through practical work to acquire experience in cultivating the soil in accordance with the seasons and the life cycle of plants.

The purpose is also for the students to awaken all their senses through the gardening activities and thereby be able to connect with nature and its life processes. This develops students' empathy and understanding of plants and animals and a deeper appreciation for Mother Earth!

In addition, students must have knowledge about the environment and sustainability and how to translate that knowledge into action with the aim of taking responsibility for the earth and our common future.

It is one of the most important tasks of our time to help children and young people feel who they are, and here nature and practical/useful work together play a significant role.

## Objectives and Final Goals of the Subject

Horticulture (H)

The teaching gives students the opportunity to

- acquire knowledge, experience and skills regarding soil, composting, plant care, harvesting and processing of crops and nutrition.

**Byens Steinerskole / Waldorf International School Copenhagen**

Otto Busses Vej 47, 2450 København SV

kontor@byenssteinerskole.dk +45 71 96 70 52

[www.byenssteinerskole.dk](http://www.byenssteinerskole.dk)



### Sustainable Education (SE)

Based on the local environment, the teaching gives the student the opportunity to

- understand man and nature in a sustainable context and be able to act accordingly.

### Body and Language (BL)

The teaching gives the student the opportunity

- strengthen and develop their physical ability and motor skills.
- clarify the meaning of the language's concepts through practical experience  
make the student aware of the non-verbal language of nature.

### The Classroom

The "classroom" at the school consists of a garden area and an associated pavilion, which is used as a teaching room, tool room and storage room for the garden.

In the garden, we work with biodynamic cultivation. We have vegetables, flowers, grains and edible wild plants; in addition, a medicinal herb garden, a small orchard, apiary, insect hotels and bird boxes, fire pit, outdoor kitchen, rainwater tank and a 'solar oven', where the sun's heat is used to dry fruit and vegetables.

The school sorts waste according to Copenhagen Municipality's guidelines.

Establishment of the school's apiary is being developed together with students from selected classes and will be a permanent part of the school garden's activities from spring 2024.

### The Subject

The school's students have gardens at all grade levels. Classes are taught for 10 weeks on each side of the summer holidays from August to October and April to June. From Class 1 to Class 4, the students come together with their class teacher in a subject lesson once a week.

From Class 5 to 8, the classes have a weekly double lesson. From Class 9, students have gardening in connection with the science subjects and periods.

**Byens Steinerskole / Waldorf International School Copenhagen**

Otto Busses Vej 47, 2450 København SV  
kontor@byenssteinerskole.dk +45 71 96 70 52

[www.byenssteinerskole.dk](http://www.byenssteinerskole.dk)



All students participate in the garden's cycle of composting, sowing, plant care, harvesting and processing crops. The teaching is organized partly based on what the garden needs and partly based on the individual class' annual themes. Work is periodically carried out across the subjects of home study, zoology, geography, history, botany, ecology and food science. The garden is available as a teaching room for all subjects.

In addition to activities in the garden, which are also open to the local area, the whole school participates in the Danish Nature Conservation Association's annual waste collection as part of horticultural education. This takes place in the local area.

Development of the Subject		
Content and Focus	Objectives	Final Goals
<p><b>Class 1 and 2</b>            From August to October, students harvest seeds, herbs and other crops and taste it all. Classes talk about seeds, plants and animals and wonder together and how life springs anew. Class 1 students sing about the harvest and play on stone and wood. Class 2 makes seed instruments and participates in incidental work such as raking, collecting stones and sticks. Students prepare the soil for winter, i.e. weed, spread manure, sow green manure and cover the ground with leaves.</p>	<p>Horticulture (H) is the focus in these classes.</p>	<p>The teaching gives the student the opportunity to:</p> <ul style="list-style-type: none"> <li>● sense and experience life in the garden</li> <li>● get to know the plants and become good friends with them</li> <li>● become familiar with soil, rotten leaves, worms and other small animals</li> <li>● get a feel for the time of year in nature</li> <li>● learn to take care of it all</li> <li>● feel the wonder of Mother Nature</li> </ul>

**Byens Steinerskole / Waldorf International School Copenhagen**

Otto Busses Vej 47, 2450 København SV

kontor@byenssteinerskole.dk +45 71 96 70 52

[www.byenssteinerskole.dk](http://www.byenssteinerskole.dk)



<p>From April to June, students weed, spread manure, sow beans and sunflowers. Students eat herbs, dig up rhizomes, clean them and eat them. They take care of the new sprouts with weeding, water and singing and talk about what they experience and wonder together. Children also listen to fairy tales related to horticulture such as Goblin stories, "Golden Grey", "The barn that had to be filled", and excerpts from <i>The King of Ireland's Son</i> and <i>Saint Elisabeth</i>.</p>		
<p><b>Class 3</b>          From August to October, students are involved in harvesting grain and flax with a sickle, binding, threshing and grinding grain by hand, processing crops - pickling, baking, etc. in collaboration with the class teacher. Students learn about farming life in the "old days" in connection. Students learn about what it means to plow like a horse, cut grass with a scythe, dry hay, prepare the ground for winter, and clean/lubricate tools before winter. Students sing songs by artists such as Jeppe Aakjær and others.</p> <p>From April to June, students are involved in getting the soil ready for spring by weeding and using manure. Students continue to work with composting and have conversations about the midden and the cycle between</p>	<p>The class acquires knowledge and skills within Horticulture (H) Sustainable Education (SE) and Body and Language (BL).</p>	<p>The teaching gives the student the opportunity to:</p> <ul style="list-style-type: none"> <li>● use the body in practical work and develop motor skills in handling garden tools and tasks</li> <li>● gain an insight into peasant life before industrialisation</li> <li>● gain awareness and experience in what self-sufficiency entails in terms of work, knowledge and time</li> <li>● practice craft skills so that you can manage without technical aids</li> <li>● get an initial insight into the wonderful world of bees</li> <li>● strengthen the body's muscles and motor skills through practical work</li> <li>● gain linguistic knowledge of simple concepts and link them to experiential content</li> </ul>



<p>midden involving soil and plants and be able to "read" the weather and sense when it is time to sow, water and care for plants. Students will eat the harvest of herbs and Jerusalem artichokes. Finally, students will investigate the life cycle of the bees. Singling about the learning will also take place.</p>		
<p><b>Class 4</b>          From August to October, students focus on animals in connection with zoology. Students explore nature, looking for frogs, toads and insects to learn about their habitats. Students repair and build insect hotels and fences and make sure there is water in the insect pools. Students also eat herbs and apples etc. They hear about the bees and then observe them in their natural habitat. Students clean bird boxes and set them up. Students possibly feed birds all winter in collaboration with the class teacher and plant bulbs and tubers that will become bee plants.</p> <p>From April to June, students participate in the garden's important goal of Spring work. Students draw a map of the garden during their Geography lessons. They also</p>	<p>The classe acquires knowledge and skills within Horticulture (H) Sustainable Education (SE) and Body and Language (BL).</p>	<p>The teaching gives the student the opportunity to:</p> <ul style="list-style-type: none"> <li>● gain experience and knowledge about the animals in the garden and how we look after them through records and maps</li> <li>● develop a sense of space and direction in the garden</li> <li>● gain more awareness of what grows in the garden and where</li> <li>● learn about practical knowledge about the Vikings' way of life</li> <li>● use your physical powers and control them by practicing focus and precision.</li> </ul>



<p>collect edible wild herbs and cook Viking food on a fire. Conversation about the Vikings' food, clothes, household utensils, tools also takes place. Students grind grain on stones, split firewood and chop rafters with an ax.</p>		
<p><b>Class 5</b>          From August to October, students harvest and taste the garden's crops. The focus is on botany in collaboration with the class teacher. Students will be involved in the observation of plants, searching for moss, lichen and mushrooms and then creating drawings of them. Students participate in the garden's autumn work and by doing so grow awareness that gardening is a craft. Finally, students will divide and plant perennials for the bees.</p> <p>From April to June, students are engaged in pre-sprouting, pricking and transplanting plants. They find plants in nature and determine them from the plant encyclopedia and draw them. Students make salads, herbal tea, and lemonade from the garden's herbs, weeds and flowers. They participate in the garden's spring work and consciously practice gardening. Finally, students have a deeper introduction to the</p>	<p>The class acquires knowledge and skills within Horticulture (H) Sustainable Education (SE) and Body and Language (BL).</p>	<p>The teaching gives the student the opportunity to:</p> <ul style="list-style-type: none"> <li>● gain an insight into plant anatomy through practical activities</li> <li>● determine the species and know where they grow</li> <li>● experience the beauty of plants through observation and drawing and painting tasks</li> <li>● learn about the edible flowers and wild herbs</li> <li>● practice doing a task correctly, carefully and beautifully.</li> <li>● develop faith in their own abilities in gardening</li> <li>● make beautiful, simple food from the garden's produce</li> <li>● get an insight into the life of the bees in relation to the flowers</li> <li>● use your strength and develop motor skills through garden crafts</li> </ul>



<p>world of bees with the opportunity to harvest spring honey.</p>		
<p><b>Class 6</b>          From August to October, students harvest and taste the garden's crops. Students focus on medicinal herbs in connection with the subject of science . They harvest and dry herbs and seeds from the herb garden and learn about the herbs, their names and uses. Students package and resell dried herbs and seeds at the school's Christmas market. They make herbal tea, herbal salt, rose sugar and fragrance oils. Students learn about herbal medicine in the Middle Ages, the monastic system and the first hospitals and herbs used in modern medicine. They repair or make plant signs and take them in for the winter. Students participate in general autumn work in the garden.</p> <p>From April to June, the focus is on waste sorting and training as ambassadors with visits to recycling sites. They guide the students in the other classes to sort correctly. Students participate in the garden's general spring work, chopping firewood, repairing fences. Students have the opportunity to make spring soup.</p>	<p>The class acquires knowledge and skills within Horticulture (H) Sustainable Education (SE) and Body and Language (BL).</p>	<p>The teaching gives the student the opportunity to: understand and participate in the necessary gardening</p> <ul style="list-style-type: none"> <li>● practice the craftsmanship of horticulture</li> <li>● gain experience in harvesting and processing herbs</li> <li>● get an insight into medieval herb gardens and herbal medicine</li> <li>● gain knowledge about the use of herbs before and now and see them in a historical perspective</li> <li>● gain insight into and experience with waste sorting</li> <li>● pass on knowledge about waste sorting to the school's other classes</li> <li>● get life in the body and stay present through physical work</li> <li>● experience how to talk and reason about science and phenomena</li> <li>● gain recognition of concepts through experiential content</li> </ul>



<p><b>Class 7</b>          From August to October, students focus on cultivating their own beds. They work the harvest and taste different crops. Students cut apple rings and dry them in the solar oven. They prepare their own beds for winter: weeding, fertilizing, sowing or covering the ground while growing awareness of the work process and why we do what we do. Students hear about composting and different forms of soil improvement. They build a compost pile and look at soil structure regarding clay, sand, and humus. There is an introduction to Maria Thun's <i>Sowing Calendar</i> in relation to biodynamic farming and the teaching of astronomy in science class.</p> <p>From April to June, students work in pairs or groups on the beds by making their own beds ready for spring, choosing crops and drawing up a sowing plan. They sow and look after their own plants. Students make herbal tea, eat herbs and their early crops.</p>	<p>The class acquires knowledge and skills within Horticulture (H) Sustainable Education (SE) and Body and Language (BL).</p>	<p>The teaching gives the student the opportunity to:</p> <ul style="list-style-type: none"> <li>● get practical knowledge of different types of soil improvement</li> <li>● get an insight into the alchemy of composting</li> <li>● know and be able to handle working with the soil from harvest to sowing.</li> <li>● expand your knowledge and skills regarding soil, composting, plant care, harvesting and processing of crops and nutrition.</li> <li>● get to know Maria Thun's Solar Calendar</li> <li>● take responsibility for their own plants and experience the consequences of their work</li> <li>● overcome the weight of the body and do what needs to be done</li> <li>● gain awareness that what we say affects the environment</li> </ul>
<p><b>Class 8</b>          From August to October, students harvest and cook their own vegetables (see curriculum for food knowledge). Students may possibly follow-up on an agricultural trip and an ecology period in biology class</p>	<p>The class acquires knowledge and skills within Horticulture (H)</p>	<p>The teaching gives the student the opportunity to:</p> <ul style="list-style-type: none"> <li>● get an overview of what you yourself know about gardening</li> </ul>





<p>investigating photosynthesis, nature's decomposition cycle, the water cycle, the history of agriculture, and the UN's Global Goals.</p> <p>From April to June, students learn about plant propagation; such as root shoots and bulb division, etc. They cut and plant willow branches, and plant cuttings and offshoots. Students learn about pollination studying the male and female flowers of willows, hops, squash, alder trees with a focus on insects and pollination. They also investigate cultivation methods and ecology, biodynamics, permaculture, etc. There is an introduction to the biodynamic preparations, stirring the humus and spraying it on the school's green areas. They may be possibilities to prepare a permaculture bed with ground cover. Students gain insight into the nutrients of potassium, sodium and phosphorus and their impact on plant growth. Students also gain knowledge of the trees' mutual communication. Finally, students summarize their experiences and knowledge from the garden.</p>	<p>Sustainable Education (SE) and Body and Language (BL).</p>	<ul style="list-style-type: none"> <li>● practice taking on a task, completing it and following it through to the end</li> <li>● gain insight into and experience with different cultivation methods and their influence on nature's balance</li> <li>● gain insight into and experience with plant propagation.</li> <li>● increase awareness of the process from farm to table in relation to nutrition</li> <li>● make a meal plan based on your own harvest and put it into practice</li> <li>● aim and use your physical strength on something constructive</li> <li>● become aware of your own influence on the environment</li> </ul>
<p><b>Class 9</b> From August to October, students harvest and taste the garden's crops. The theme of the period is landscape art – entering into a dialogue with nature through artistic creation. From nature's own materials,</p>	<p>The class acquires knowledge and skills within Horticulture (H)</p>	<p>The teaching gives the student the opportunity to:</p> <ul style="list-style-type: none"> <li>● put their garden experiences into perspective and find ways to turn them into assets</li> </ul>



<p>students create two- and three-dimensional works around the garden. A new premise is given for each new task such as in relation to space, choice of materials and intention. Work is done solo and in groups. As an introduction to the tasks, there is plant observation in silence. In addition, the students write haiku poems, partly as an opening to the assignment and partly as a reflection at the end of the lesson.</p> <p>From April to June, the period's theme is a summary and perspective of nine years of horticulture. The students summarize their knowledge, experiences and practical skills from the garden: What do we do, how, when and why? How can we take it into the future and make it an asset? Depending on the class's response, the students can then work with one or more of the UN's World Goals, which are related to the garden. Or they may choose a favorite occupation in the garden, which is refined to the utmost; they can pick up something that they would like to get better at, or take on a construction task – e.g. build a mist bench, a saw trestle or a rafter fence.</p>	<p>Sustainable Education (SE) and Body and Language (BL).</p>	<ul style="list-style-type: none"> <li>● work together on practical tasks and find solutions together</li> <li>● be attentive and present in nature and experience joy and respect for the created</li> <li>● see nature's own beauty right down to the detail</li> <li>● enrich the earth with his presence, his creative power and aesthetic sense</li> <li>● give meaning to things and activities by connecting with them and engaging with them</li> <li>● develop life skills and a strengthened belief in one's own abilities and options</li> <li>● get to know the many aspects of sustainability from production and consumption to social and economic sustainability, including through the UN's Global Goals.</li> <li>● get a range of options for sustainable behavior in everyday life, including cultivation methods and waste sorting</li> <li>● sharpen one's perception and ability to observe</li> <li>● gain a heightened awareness of how to speak and reason about science and phenomena, and the concepts</li> <li>● gain experiential content identified through acting practices</li> <li>● describe nature experiences through artistic, verbal and non-verbal activity</li> <li>● continue to be able to feel the wonder of nature</li> </ul>
---	---	--