EQF4-G | Gardener

Descriptors on level 4:

K: Factual and theoretical knowledge in broad contexts within a field of work or study

S: A range of cognitive and practical skills required to generate solutions to specific problems in a field of work or study

R/A: Exercise self-management within the guidelines of work or study contexts that are usually predictable, but are subject to change; supervise the routine work of others, taking some responsibility for the evaluation and improvement of work or study activities

Unit	Unit title	
0	**Key competences and basic skills**	**R**
0.A	**Adaptability** *is about intrapreneurship, innovation, communication, analysing, critical thinking, cooperation etc.* - can investigate, learn, explore and innovate - thinks and analyses critically and solves issues - knows the value of other ideas, concerns and motives	EQF4-G EQF4-L
0.C	**Creativity** *is about problem solving, idea development, innovation etc.* - has an open and curious mindset in order to develop new ideas - puts new ideas into action to solve issues/problems or develop new services/products	EQF4-G EQF4-L
0.S	**Sustainability** *is about waste, water, energy, economy, people etc.- related to key competences and basic skills* - knows the basics of ecological processes in natural systems - plans and carries out work tasks in an environmentally sustainable way - adjusts working processes within a set of guidelines, in order to maintain sustainability in a changing environment - assesses the environmental impact of a work process	EQF4-G EQF4-L
0.T	**Technology** *is about basic digital tools (ICT, mobile phone, photo)* - - carries out work tasks using digital tools	EQF4-G EQF4-L

		- knows relevant equipment and machinery
		- knows basic legislation concerning reproduction of digital resources for private and commercial purpose
		- understands the risks of web-based communication i.e. virus, malware
		- evaluates web pages for relevance and reliability of content
		- participates in evaluating the use of technology in a work task

1	Sector core competence	Knowledge	Skills	Responsibility and autonomy	R
1.1	**Production** (sector related) *is about workplace, tools, working procedures, botany (plant classification, botanical names, growing conditions)*	- knows about workplace organization and effective work processes - knows a range of relevant tools, materials and techniques - has broad botanical knowledge - knows the plant classification, botanical names and the best growing conditions - knows quality characteristics of a broad range of flowers and plants	- designs the workplace according to ergonomic and effective aspects - plans and explains procedures - recognizes plants and their parts - recognises different soils and applies fertilizer accordingly - explains plant diseases and pests and their causes - chooses the most efficient method for their own work and for the team before work begins - adjusts this method if it gives better results	- self-manages - reacts to new requirements and deduces procedures from them - supervises others' routine work - is responsible for parts for the production - determines care requirements from the external appearance of a plant - takes some responsibility for selecting the appropriate crop protection agent and successfully changes the growing conditions	EQF4-L
1.2	**Product development** (sector related) *is about: supply, partners/network, marketing, develop products (mapping needs, plan, work in a creative process, creative tools…)*	- knows several sources of supply and partners in the sector and related sectors	- works with different partners, building networks and building sales markets - develops products	- observes the market, draws conclusions and reacts to current trends, under instruction	EQF4-L

			- knows about core product development related to the green sector	- finds specific solutions to a customer's needs - uses different methods and creative tools - considers opportunities for establishing new business in accordance with current regulations, and ethical and ecological principles	- manages themself in a product development process - takes some responsibility in supervising others in routine development work	
1.3	**Communication and company** (sector related) *is about start-up/entrepreneurship, marketing, law and regulations, communicate with customers verbal and visual, sales and services*	- knows about company forms, start-ups, requirements and regulations for companies - knows marketing opportunities and marketing measures - knows the common legal guidelines connected to green sector - knows business models, relevant laws and authorities - knows the applicable insurance companies - knows how to work in a working environment, together with other employees and trainees	- handles sales situations with an emphasis on professional customer care - observes legal and tax requirements when establishing and running a company - observes what is changing inside and outside the company and adjusts procedures / activities / methods with a view to the future - prepares simple budgets for operation and investments - uses digital tools to compile a simple economical overview for production	- manages themselves and others with some responsibility - implements new guidelines - manages routine work where other employees are involved, under instruction - communicates with customers in a sales and service context, within a limited area of responsibility	EQF4-L

			- knows duties and rights of employees and employers	- prepares an employment contract in accordance with current legislation	
1.4	**Health and Safety** (sector related) *is about health precautions, safe working methods, cleanliness/hygiene, equipment, pesticides, botany, working environment*	- knows health and safety regulations that are relevant for work processes in the sector - knows the requirements for health and safety clothing in the sector	- undertakes work tasks and activities in accordance with health and safety regulations - uses the right work technique and appropriate protective measures - derives changes from findings and controls - carries out work operations in an ergonomically correct way	- chooses equipment and protective clothing suitable for weather and climate conditions and the task at hand - takes responsibility for the health and safety situation for a limited part of the work process or routine work - keeps up to date and adapts to new health and safety legislation and regulations - instructs and manages employees and trainees within basic tasks and clear guidelines	EQF4-L
1.S	**Sustainability** (sector related) *is about sustainable use of resources, ecological footprint, fair trade, protection of the environment and species,* *UNs Sustainable Development Goals* *Knowledge of your green supply chain* *Cradle to cradle, circular economy*	- knows the ecological footprint of natural activity and production - knows the dangers of pollution and excessive interference with nature	- describes and evaluates sustainable development and resource management, connected to limited assignments - develops nature-based activities and products within a sustainability framework	- manages the use of natural resources in routine work or projects of a limited size, based on ecological understanding and ethical norms	EQF4-L EQF4-F

			- evaluates ways of re-using and multi-using products, and recycling waste		
1.T	**Technology** (sector related) *is about digital tools (for payment, communication, in the production)* *- technological tools (VR...)*	- knows several machines, tools, devices and instruments used in this sector - knows about digital communication and technical components - knows about online trading	- chooses the right digital tools, devices and instruments in a work process - performs routine maintenance on tools and instruments under instruction - undertakes simple maintenance work on interiors, buildings and / or installations - uses digital tools for communication, calculation and information gathering - uses digital tools for communicating with authorities, stakeholders and costumers	- takes responsibility for the use and maintenance of buildings and equipment - undertakes tasks in communication, calculation and collection of information with digital tools independently	**EQF4-L EQF4-F**

2	Occupational core competence	Knowledge	Skills	Responsibility and autonomy	R
2.1	**Gardener production** *is about:* *Plant life processes and growth conditions* *Plant protection* *Optimizing yield* *Plant identification, classification and the use of plants* *Growth requirements* *Quality parameters* *Plant maintenance indoor and outdoor* *Storage, packaging, transport.*	- knows how to describe the use of plants and plant products - knows how to explain the importance of cultivated plants as a food source, medicine, and culinary experience - knows how to explain legislations for use of pesticides in public spaces - knows how to explain post-harvest processes in plants and plant products - knows how to describe different storage methods for plant products	- carries out a cost-efficient horticultural production with focus on work efficiency, craftsmanship and precision - prevents, records and treats disease and damage to plants, and uses pesticides in accordance with regulations - controls plant development by pruning, shaping, irrigation, fertilizing and climate-control, and by chemicals in accordance with regulations - identifies and describes cultivated plants with botanical names - identifies poisonous and allergenic plants - makes a sketch of an area based on simple registration and surveying. - proposes a planting plan based on shape, colour of the plants, and purpose - ensures a healthy and vigorous plantation by	- plans, implements and evaluate a horticulture-related production and compile a system for documentation and quality control in accordance with current standards and legislations - plans, implement and assess the use of plants and plant products as aesthetic and cultural elements - determines adequate water use, fertilisation and pest control	

			choosing a combination of plants adapted to climate and soil on the planting site - establishes and maintains plantations in different environments - optimizes growth conditions		
2.2	**Gardener product development** *is about:* - develop products and concepts, work in a creative process in gardening, visualize/draw, use creative tools, tools and techniques in gardening, presentation, make model/prototype, calculate (Often included in production)	- knows opportunities to increase the value of a horticultural product through further processing	- proposes new gardening products based on local natural resources	- develops a horticulture business by developing new products and services - helps to introduce innovative technologies in relation to varieties, pests and diseases - assesses business opportunities based on natural resources - assesses and develops business opportunities for managed land	
2.3	**Communication and company** *is about:* -retail -framework conditions in the gardening sector -documentation	- knows cooperatives and other common company types related to sale and processing of horticulture products - knows framework conditions for the horticultural sector - knows forms of retail in the horticultural sector	- prepares products for sale, calculates and sets sales prizes - creates exhibits, plant arrangements, presentations - evaluates the use of packaging as part of marketing	- plans, implements and evaluates the sales of plants, plant products, and gardening services based on market and costumer requirements for product selection and quality - trains employees and apprentices taking	

	- laws and regulations, norms of business, entrepreneurship - sales and services in gardening - economics and management - marketing (web, social medias…)		- assesses quality and takes out goods for sale at the right time considering use and demand - prepares logistics and attends to control procedures and documentation requirements for storage, packaging and transport - markets plant products nationally and internationally in accordance with current regulations and follows routines for documentation - identifies and tests out gardening products and services in a market - prepares a tender for a simple work assignment in horticultural production	responsibility for their development, - supervises employees' routine work - integrates new things into the work process	
2.4	**Health and Safety** *is about:* - safe use of tools and remedies - regarding how the gardener works, handles plants with pesticides…	- explains legislation regulating use of pesticides in public spaces and living areas	- works according to legislation that regulates use of pesticides and handling of pesticide treated plant material	- assesses risks in gardening productions and carries out work in accordance with current health, environmental and safety legislation	2.4

| 2.S | **Sustainability**
is about:
- waste prevention, reduce wastage, sustainable methods (re-use, recycle) and techniques, saving and efficient use of water, xero-gardening, rainwater harvesting, environmentally friendly materials and techniques, managing stock, using local products | - knows how business practises in gardening production and gardening services affects local communities, environment and biodiversity | - assesses environmental and energy economy measures in plant production | - takes responsibility for minimizing the environmental impact of a work task or work process in horticulture

- evaluates the effects of water usage

- evaluates possibilities such as rainwater extraction and xero-gardening and to use water efficiently | 2.S |
| 2.T | **Technology**
is about:
- digital tools and technology
- in communication, sales.
- online web-based sales and ordering, relevant for retail trade | - knows relevant digital tools in production planning, product development, sales and marketing in gardening | - uses and maintains equipment, machinery and buildings in accordance with regulations

- uses trucks and tractors in plant production in accordance with current legislation

- uses digital tools for communicating with authorities, stakeholders and costumers

- uses digital tools such as digital maps and digital control- and measurement instruments. | - carries out work tasks involving relevant digital tools in gardening autonomously

- adapts usage and maintenance of vehicles and equipment to current legislation and standards

- participates in the evaluation of the use of technology in a work task in gardening | |