

STUDY DESCRIPTION (I.e. Vocational level)

Course title:	Healthcare logistician
Course code:	
Contact hours:	24h
E-Learning hours:	24h
Prerequisites:	Basics of logistics for social and health care
Course unit leader:	Antti Ahonen, Tuula Hovilainen-Kilpinen, Katja Makkonen , Jari Pulkkinen

Aims and objectives:

Health logisticians' know how to plan their work and act in the different stages of healthcare logistics process following the principles of quality work and sustainable development. The main aim is to get competence to work as a healthcare logistician in a health care unit. The unit may be in an elderly care home, a healthcare factory, a hospital warehouse or work as a independent healthcare goods provider.

Healthcare logisticians are able to take advantage of their language proficiency, information and communication technologies, digital operating methods and automation made possible by their working environment. They are capable of working in multi-professional cooperation and in customer service.

Entry criteria and evaluation methods

The course is designed for those students/ professionals who wish to build their professional carrier around healthcare logistics.

The vocational skills required for completing the module of health logistics is demonstrated by performing practical tasks in authentic situations and work processes (demonstration of knowledge and skills). A teacher and a working life representative will assess the student's knowledge and skills compared to the competence defined in the qualification requirements. The education provider will then awards the student a certificate once the course has been completed acceptably in accordance with the course requirements laid down by Salpaus and the Finnish National Agency for Education.

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Grading scale/Pass requirements are Satisfactory S1 / Satisfactory S2 / Good G3 / Good G4 / Excellent E5

Learning outcomes, competencies:

Through the successful participation in the course, the following competencies can be acquired:

Study module	Competencies
The basics of warehousing in healthcare (5 ECTS)	<ul style="list-style-type: none"> • play a role in the logistics system as befits his/her duties • understands the key concepts in the industry • understands the stages in receiving and storing of goods • observes instructions on working safety • uses basic equipment and tools for warehouse working • uses the correct packing methods and the necessary labels • uses different transport documents • appreciates the principles of stock control and the cost structure of the stock • handle goods without damaging them
The basics of health care in Logistics “ as a warehouse worker in health care” (5 ECTS)	<ul style="list-style-type: none"> • Works according to social and healthcare regulations, laws, guidelines, principals and values • Plans and works under legislations and guidelines of preventive methods in infection protection • Uses basic concepts in prevention of infection ports and follow good practices in working places cleanness and hygiene • Uses the basic concepts of infection preventive work in equipment • Handles and sorts equipments • Communicates with all client levels and serve them professionally • Promotes working safety, health and well-being • Acts on principals of sustainable development • Confirms the rules of cleaning, disinfecting methods and to confirm working- and cemical safety

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	<ul style="list-style-type: none">• Develops her/his own work by professional basis and knowledge• Practices as HL in healthcare unit
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Course description:

The course consists of two basic modules. The structure of education will be personalized to take into account students individual competence, basic vocational education and work life experience. The student may study the whole course of logistician or healthcare part or both of them or even one part of both of them. All parts are divide into smaller thematic, logically consistent units.

Aseptic working methods, compliance with good hygiene practices, and the prevention of infections by different methods are key areas in the competence of health logisticians regardless of their working environment. Transporting of the equipment is a core part of the health care process. They also know how to handle the piece of equipment correctly and safely. They know the basics of transport, warehousing, and logistics services. Can transports goods, and vehicles to their destinations efficiently and safely, serving customers as well as possible. Those working in the warehousing sector handle and move different goods into warehouses and out to consumers. Skills in handling different vehicles, machines and equipment are also required for working in the sector. Healthcare logisticians know how to observe the national and international ethics rules and regulations concerning healthcare and logistics, have good manners, and abide by good operating practices. They are familiar with data protection, confidentiality, and the regulations on consumer protection in their work. They work ergonomically and contribute to wellbeing at the workplace. They value and develop their own work and their vocational field. They have a realistic understanding of their competence. They develop their vocational skills in accordance with the principles of life-long learning. They evaluate and analyse their work, set learning goals for themselves, and take advantage of continuing vocational education and training. They have the capabilities to continue to further studies.

Methodology

In order to achieve the goals presented above blended learning methods are applied. The courses are based on the combination of face-to-face training sessions, e-learning methods and on-the-job-learning. The face-to-face training is an action-oriented, which ensures the possibility of experience-based learning. All these face-to-face exercises are accompanied by e-learning materials with the aim at providing an insight into the theoretical foundations of the training material and leaving space for reflection. On-the-job-learning and vocational skills demonstration is in the end of course. On-the-job-learning lasts 3 weeks at minimum.

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Course schedule:

The basics of warehousing in healthcare (5 ECTS):

<i>Consultations</i>	<i>Topic</i>
Individual learning (before entering the course)	Introduction to healthcare logistics Assessment criteria for HL education and ways to study
Contact day 1.	Introduction to the course and knowledge of warehousing: <ul style="list-style-type: none"> • Laws, risk analysis in logistics, employers responsibilities, duties and rights • Knowing different kind of packaging equipment. Use them safely, in accordance with instructions
Individual learning	e-learning modules: <ul style="list-style-type: none"> • Terminology of logistics • packing and handling notes • packaging materials
Contact day 2-4.	Basic equipment and tools for warehouse working <ul style="list-style-type: none"> • knowledge of equipment, using of necessary equipment • waybill, referral • receipt goods, checking goods, shelving goods.
Individual learning (between contact days/ hours)	e-learning modules: <ul style="list-style-type: none"> • Basics of delivery chain, basics of material management
Contact day 5-6	The principles of stock control and the cost structure <ul style="list-style-type: none"> • Use transport documents, operate warehouse software • Cost structure calculation, purchase and sales operations Introduction to on-the-job-learning and vocational skills demonstration
3 weeks on-the- job-learning	Growth of Professional skills <ul style="list-style-type: none"> • 3 weeks on-the –job-learning • work planning • working life skills • life-long-learning

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The basics of health care in Logistics (5 ETCS):

<i>Consultations</i>	<i>Topic</i>
Individual learning (before entering the course)	Introduction to healthcare logistics Assessment criteria for HL education and ways to study
Contact day 1.	Introduction to the course Basics of Healthcare legislation <ul style="list-style-type: none"> • Basics of Healthcare legislation • Laws and guidelines of chemical goods • Nursing guidelines, evidence based Hc • Nursing values and principals Basics of nursing concepts Hc organizations in Finland
Individual learning (between contact days)	Nursing values and principals in practise Evidence based nursing and argumentation Students home city Hc organization Risks of bad aseptic Aseptic videos from SanomaPro`'s sites
Contract day 2-4	Aseptic <ul style="list-style-type: none"> • basics of aseptic • infection prevention • common infections prevention and treatment in hc • aseptic hand wash and disinfection • personal hygiene in Hc • Aseptic conscience • isolation guidelines and classification Aseptic containment hygiene: <ul style="list-style-type: none"> • hand wash and disinfection • wearing and taking care of isolation clothes
Individual learning between contact days	www.opinportti.fi (Infektioiden torjunta) Infection prevention course Working safety in Hc <ul style="list-style-type: none"> • ergonomics
Contact day 4-5.	Equipment maintenance process and equipment <ul style="list-style-type: none"> • clients/patients/ equipment logistic in Hc organization

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	<ul style="list-style-type: none"> • equipment knowledge (most common instruments in operations, sets, operation baskets, optics, containers) • oxygen, manual mucus suction pump, surgical aspirator, pulseoxymeter)
Individual learning between contact days	Sustainability Waste recycling
Contact day 6	Customer service <ul style="list-style-type: none"> • nurses and other professions in different Hc organizations • elderly clients • surgical patients • dementia clients • aggressive clients • mental and abused clients Introduction to on-the-job-learning and vocational skills demonstration
3 weeks on-the-job-learning	Growth of Professional skills <ul style="list-style-type: none"> • 3 weeks on-the –job-learning • work planning • working life skills • life-log-learning

Assessment and grading criteria:

Evaluation is part of the on-the-job-learning process. The evaluation tools intent to measure personal development through the on-the-job-learning as a whole. Student may show his/her professional competence in end of the period by vocational skills demonstration. She/he will write a plan for it and open all the assessment criteria to the mentor and teacher. She/he may also use learning diary to help Vocational skills demonstration. The mentor will give the students a written evaluation, the teacher will record it. Student don't have to make any self-evaluation and she/he has 2 weeks' time to remediate the evaluation,

The vocational skills demonstration assessment will be scaled/Pass requirements Satisfactory S1 / Satisfactory S2 / Good G3 / Good G4 / Excellent E5

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Student role in the logistics system his/her duties and befits

Satisfactory 1	knows how the company's purchase and sales operations affect storage
Satisfactory 2	
Good 3	understands the basic principles of the purchase and sales operations
Good 4	
Excellent 5	assesses the effect of purchase and sales on storage

Student understands the key concepts in the industry

Satisfactory 1	is familiar with some of the most common storage systems, equipment and concepts
Satisfactory 2	
Good 3	is familiar with different storage systems, equipment and concepts
Good 4	
Excellent 5	is familiar with all storage systems, equipment and concepts

Student understands the stages in the reception and storage of goods

Satisfactory 1	transfers goods to their storage locations, putting them away without damaging them and following instructions
Satisfactory 2	
Good 3	knows the storage address system and transfers products to the correct locations
Good 4	
Excellent 5	transfers the arrival

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	data to the inventory accounting system using updated order information
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Student observes instructions on working safety

Satisfactory 1	observes the regulations and instructions on working safety and knows the factors that affect wellbeing at work
Satisfactory 2	
Good 3	identifies and avoids safety risks and takes account of the effect of ergonomics on health
Good 4	
Excellent 5	assesses and develops his/her work environment and makes his work practices safer

Student uses basic equipment and tools for warehouse working

Satisfactory 1	uses basic equipment in warehouse, observing safe work practices
Satisfactory 2	
Good 3	competently uses different equipment for collection and dispatch, observing safe work practices
Good 4	
Excellent 5	uses different equipment In warehouse, methodically and with no mistakes, observing safe work practices

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Student uses the correct packing methods and the necessary labels

Satisfactory 1	packs products following instructions
Satisfactory 2	
Good 3	chooses the right packaging for each consignment and uses packaging materials in accordance with the company's instructions on environmental protection
Good 4	
Excellent 5	is competent when it comes to economical packing techniques and observes the instructions on environmental protection in an exemplary manner when using packaging materials

Student uses different transport documents

Satisfactory 1	is familiar with the necessary transport documents
Satisfactory 2	
Good 3	uses different kinds of transport documents
Good 4	
Excellent 5	is familiar with the most common documents used for international transport and interprets the information contained in them

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Student appreciates the principles of stock control and the cost structure of the stock

Satisfactory 1	under supervision, understands the principles of stock control and its purpose, and knows the costs of storage
Satisfactory 2	
Good 3	knows the purpose of the main stock performance indicators, knows the costs of storage,
Good 4	
Excellent 5	knows the content of stock performance indicators and its effects on costs, and can say what actions influence what trends in indicators

Student knows how to handle goods without damaging them

Satisfactory 1	transfers goods to their storage locations, putting them away without damaging them and following instructions
Satisfactory 2	
Good 3	knows the storage address system and transfers products to the correct locations
Good 4	
Excellent 5	knows the principles behind establishing a storage address system and, if required, creates new storage locations

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The basics of health care in logistics “ as a warehouse worker in health care” (5 ETCS):

Student follows the laws, rules and guidelines in his/her work

Satisfactory 1	<p>Follows social and health care laws, guidelines, regulations and ethical principles in some situations.</p> <p>Follows the principals of sustainability</p> <p>Classifies the waist, uses disposable goods appropriate</p>
Satisfactory 2	
Good 3	<p>Follows social and health care laws, guidelines, regulations and ethical principals in chancing situations.</p> <p>Follows the principals of sustainability and explains her/his work</p> <p>Classifies the waist, uses disposable goods appropriate and recycles well</p>
Good 4	
Excellent 5	<p>Follows social and health care laws, guidelines, regulations and ethical principles and explains his/her decisions.</p> <p>Follows the principals of sustainability and explains her/his work and makes development ideas</p> <p>Classifies the waist, uses disposable goods appropriate and recycles well. Understand also the environmental aspect in sustainability</p>

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Student plans and prevents infections in equipment maintenance work

Satisfactory 1	<p>Knows the basic of equipment maintenance process</p> <p>Knows the basic precautions in different levels of equipment maintenance</p> <p>Checks the readiness in different levels of equipment maintenance</p> <p>Knows the cleanness rules and levels of cleanness</p>
Satisfactory 2	
Good 3	<p>Knows the equipment maintenance process</p> <p>Knows the basic precautions in different levels of equipment maintenance</p> <p>Checks, prepares and predicts the readiness in different levels of equipment maintenance</p> <p>Knows the cleanness rules and levels of cleanness and makes the work aseptic.</p>
Good 4	
Excellent 5	<p>Knows the equipment maintenance process</p> <p>Evaluates the basic precautions in different levels of equipment maintenance and gives development ideas.</p> <p>Checks, prepares and predicts the readiness in different levels of equipment maintenance</p> <p>Knows, guides and ensures the cleanness rules and levels of cleanness and makes the work independently</p>

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Student follows the basic precautions in cut the contamination chain.

Satisfactory 1	<p>Takes care of hand hygiene</p> <p>Isolates properly</p> <p>Understand and works in aseptic orders</p> <p>Takes care of the cleanness and order in working unit</p>
Satisfactory 2	
Good 3	<p>Takes care of hand hygiene and uses basic precautions to prevent infection chains</p> <p>Isolates properly and argues with facts</p> <p>Takes care of the cleanness and order in working unit and assess own work in infection prevention</p>
Good 4	
Excellent 5	<p>Takes care of precautions to prevent infection chains in every equipment maintenance process</p> <p>Isolates properly and argues with facts in patient safety view.</p> <p>Takes care and guides the cleanness and order in all equipment maintenance process levels.</p>

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Student plans his/her work

Satisfactory 1	Plans and makes targets for his/her work with someone else Works together with someone else Plans his/her daily work as a member of working team
Satisfactory 2	
Good 3	Plans the work and take care of the client's needs and culture. Plans his/her work and takes care of the weekly plans of working team Work as a member of working team
Good 4	
Excellent 5	Plans the work and take care of the client's needs and culture. He/she makes own options and explains his/her own work Plans his/her work and takes care of the weekly plans and other plans of working team Work as a member of working team and knows his/her responsibilities

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Student takes care of his/her safety, client safety, working ability and work wellbeing

Satisfactory 1	<p>Follows the guidelines of well-being and working safety</p> <p>Acts aseptically</p> <p>Knows the basics of infection prevention</p> <p>Knows how to use common equipment in work</p> <p>Notices the aggressive clients behaviour</p> <p>Knows the working places safety plan</p> <p>Knows the basics of the risk handling</p> <p>Works as a member of working team</p> <p>Understands the basics of ergonomics</p>
Satisfactory 2	
Good 3	<p>Follows the guidelines of well-being and working safety and prevents the safety risks in work</p> <p>Acts aseptically</p> <p>Knows the facts of infection prevention and may give new solutions</p> <p>Knows how to use common equipment in work aseptically</p> <p>Notices the aggressive clients behaviour and can meet him/her</p> <p>Knows the working places safety plan</p>

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	<p>Knows the basics of the risk handling and acts with it</p> <p>Works as a member of working team</p> <p>Understands the basics of ergonomics</p>
Good 4	
Excellent 5	<p>Follows the guidelines of well-being and working safety both prevents the safety risks in work and develops more solutions</p> <p>Acts aseptically</p> <p>Knows the facts of infection prevention and may give new solutions and development ideas</p> <p>Knows how to use common equipment in work aseptically and safely</p> <p>Notices the aggressive client's behaviour can meet and calm him/her.</p> <p>Knows the working places safety plan</p> <p>Knows the basics of the risk handling and may also act independently</p> <p>Works as a reliable member of working team</p>

Compulsory reading:

Recommended readings:

Hirvonen Kaisa jne 2017. Välinehuolto

Hovilainen-Kilpinen Tuula jne 2018. Lähihoitajan käsikirja

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Useful links and websites:

Suomen sairaalahygieniyhdistys. <http://www.sshy.fi/>

Terveyden ja hyvinvoinnin laitos. www.thl.fi

Terveyskirjasto. www.terveyskirjasto.fi

Terveysportti. www.terveysportti.fi

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Training plan / Student workload (EXAMPLE)

Training plan - Topics							
Training elements	Face-to-face		E-learning		Other		Total time (hours)
		time		time	Extra	time	
Days / Weeks							
Pre-assingment				2			4
Contact day 1	Content x				Hospital visit	4	8
Individual learning1 (e-learning)	Content y						18
Contact day 2	Introduction						8
Individual learning 2 (e-learning)							18
Contact day 3							8
Individual learning 3 (e-learning)							10
Contact day 3		4					8
Individual learning 4 (e-learning)				4			6
Contact day 4		8					8
Contact day 5		8					8
Individual learning 5 (e-learning)				4			8
					Closing / evaluation		8
Total time		32		8		8	128

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UTBILDNINGSTYRELSEN

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