

# **GRANDIS XXI. CURRICULUM**

# **CONNECTED CARE OF OLDER ADULTS**

**INTELLECTUAL OUTCOME 2** 







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#### **COURSE DESCRIPTION**

#### INTRODUCTION

Twenty-first century Europe is experiencing an uplift in the health of its population, with adults living longer, healthier lives than ever before. This has an impact on the demographic profile of our communities, with a higher proportion of older adults among the population. While most of these people are health and do not suffer from acute illnesses, they are more likely to contract chronic conditions and gradually they require support to live independently.

Different countries have different preferred solutions for care of older adults, with a mixture of family/community care, home helps services and residential nursing homes. It is generally accepted that the minimum amount of outside intervention is best, and that residential care should be reserved for those who need 24/7 care.

The increase in the number of healthy older adults puts an onus on society and social services to keep them safe and to maintain their good health for as long as possible. The most advantageous solution for the wellbeing of older adults is to facilitate them to live at home independently, with minimal support and assistance. Families (informal careers) are often willing to do much of this, but family time is limited with employment and child-care considerations, so the demand for social carers (formal carers) is increasing, with supply not adequately keeping up with demand. The demand and shortage of carers for older adults extends to residential nursing homes as well.

The care of older adults must also take into consideration the need they have for companionship and social interaction, for the maintenance of positive mental health which can prevent physical deterioration of ageing adults living alone.

One way to address this shortage of social carers, and to ensure social engagement, is to utilise the growing number of ICT solutions, telecare systems and appropriate social networks that are coming on to the market to support the carers and to focus their time on essential person to person interactions.

The sophistication of ICT based telecare systems being developed makes this a feasible approach, but there are few carers who have the competence to use them effectively, and to instruct the adults themselves to cooperate with the approach and to use them themselves. This is the major barrier to their widespread adoption. There are a number of contributing problems, mainly due to inadequacies in training programmes for carers of older adults, which do not cover:





- 1. The new demographic reality where there are increasing numbers requiring assistance to live active lives in their own homes
- 2. ICT based systems, apps and services that could reduce the exclusive reliance on human carers
- 3. Skills to use these telecare systems and to guide older adults to engage with them.
- 4. Knowledge of the potential of virtual networks in social care, and the competence to setup and facilitate virtual communities.

# AIM OF THE COURSE

The Connected Care of Older Adults course is a competence-based, modular training programme designed for formal and informal carers. It aims to equip carers with and understanding of the demand for new approaches to care and to enhance its delivery through the use of a variety of eHealth technologies and smart devices, like home appliance monitoring, activity sensor wristbands, movement monitors, and even some tele-diagnostic tools installed in the home. It will provide them with an advanced eHealth literacy and tailored digital competences to get the best advantage from the ICT tools.

The course will be delivered in an innovative, practice-oriented manner, competence-based and modular, as a supplement to the required vocational qualification for carers of older adults. It will develop the advanced digital skills of formal and informal social caregivers, to prepare them for effective use of the ICT-based telecare systems and prepare them to apply web-based tools for communication, keeping contact through the Internet for supporting independent living of older adults.

The delivery is intended to be practical and interactive, with on-the-job and case study components, as well as competence-based assessment and project work.

#### TARGET GROUPS

- 1. Vocational education students preparing for a career as carers of older adults.
- 2. Mature students (e.g. retired people) aspiring to work as carers of older adults
- 3. Currently qualified formal carers
- 4. Current informal caregivers involved in the long-term-care of their relatives

Remark: \*However independent of additional award in care-giving, Grandis certification would not be sufficient to work as a professional caregiver.





#### **SPECIFICATION**

The Grandis qualification will be a Certificate of Continuing Education/Special Purpose Award, granted in recognition of the attainment of learning outcomes at level EQF level 5, and corresponding national qualifications framework (Irish NFQ Level 6).

It will deliver 5 ECTS credits, which means a minimum of 125 hours of student effort, including lecture hours.

<u>Duration:</u> This can be delivered in a variety of formats. One example is a full-time programme for 5 weeks, 6 hours per day, divided between 4 hours of teaching and 2 hours of student effort, independent and group based)

#### TRAINING METHODOLOGY

This course will be developed as a fully online programme, but all resources will be available offline for face-to-face, teacher led delivery.

#### **MODULES**

- Module 1: Digital skills for caregivers (10%)
- Module 2: Active and healthy ageing (20%)
- Module 3: Assistive technologies (40%)
- Module 4: Virtual communities (30%)

### ASSIGNMENTS AND PERFORMANCE CRITERIA

These tasks are used to calculate the overall performance of the participant:

- 1. Activity in online collaboration and in the discussion-forum related to the modules.
- 2. Credited Assignment after Module 2, 3 and 4.

#### ASSESSMENT METHODS

100 credits in total for whole course

- M1 0 credits
- M2 20 credits
- M3 35 credits
- M4 35 credits





• Forum activity: 10 credits

The activities will be evaluated by the tutor.

The online test will be evaluated automatically.

Threshold for success: 75%

# **COURSE INFORMATION**

The 1st online course will start in the partner countries in English, in French, in Spanish and in Hungarian on the eLearning platform of: <a href="http://moodle.grandis21.hu">http://moodle.grandis21.hu</a>





# **MODULE 1: DIGITAL SKILLS FOR CAREGIVERS**

#### AIM OF THE MODULE

This module is intended to help participants assess their present digital skill against the European Union Digital Competence Framework 2.1. We assume that the participants have basic computer skills, therefore it is not mandatory for any student who passes the module online exam.

Optional practice exercises are available, but there also are mandatory complex exercises at the end of each topic, which should be successfully completed before proceeding to Module 2.

#### LEARNING OBJECTIVES

After the module participants will be able to evaluate their digital competences, to reveal the gaps and where they need to improve their skills. The module provides examples for digital tools and solutions frequently used in the daily work of caregivers. It includes descriptions of concrete tasks together with explanations of how to solve them and offers further free learning materials for closing any knowledge and skills gaps.

The learning outcomes of the modules are defined in the first four competence areas of DigComp 2.1 as follows.

#### 1. INFORMATION AND DATA LITERACY

# **Learning outcomes:**

The participants will be able:

- To articulate information needs, to search for data, information and content in digital environments, to select, access and navigate between them. To create and update personal search strategies.
- To compare and critically evaluate the credibility and reliability of sources of data, information and digital content. To analyse, interpret and critically evaluate the data, information and digital content.
- To organize, store and retrieve data, information, and content in digital environments. To organize and process them in a structured environment.





#### 2. COMMUNICATION AND COLLABORATION

### **Learning outcomes**

The participants will be able:

- To interact through a variety of digital technologies, to understand appropriate digital communication means for a given context.
- To share data, information and digital content with others through appropriate digital technologies. To act as an intermediary, to know about citation referencing and attribution practices and to integrate new information into an existing body of knowledge.
- To participate in society through the use of public and private digital services. To seek
  opportunities for self-empowerment and for participatory citizenship through appropriate
  digital technologies.
- To use digital tools and technologies, collaborative processes, and for co-construction and cocreation of resources and content.
- To be aware of behavioural norms and know-how while using digital technologies and interacting in digital environments. To adapt communication strategies to the specific audience and to be aware of cultural and generational diversity.
- To create and manage one or multiple digital identities, to be able to protect one's own ereputation, to deal with the data that one produces through several digital tools, environments and services.

#### 3. DIGITAL CONTENT CREATION

# **Learning outcomes:**

The participants will be able:

- To create and edit digital content in different formats to express oneself through digital means media and technologies.
- To modify, refine, improve and integrate information and content into an existing body of knowledge to create new, original and relevant content and knowledge.
- To understand how copyright and licenses apply to data, information and digital content.





#### 4. SAFETY

### **Learning outcomes**

The participants will be able:

- To protect devices and digital content, and to understand risks and threats in digital environments. To know about safety and security measures and to have due regard to reliability and privacy.
- To be conscious of personal data and privacy in digital environments. To understand how to use and share personally identifiable information while being able protect oneself and others from damages. To understand that digital services use a "Privacy policy" to inform how personal data is used.
- To be able to avoid health-risks and threats to physical and psychological well-being while
  using digital technologies. To be able to protect oneself and others from possible dangers in
  digital environments (e.g. cyber bullying). To be aware of digital technologies for social wellbeing and social inclusion.
- To be aware of the environmental impact of digital technologies and their use.

### **TOPICS**

- 1. Information and data literacy
  - 1.1 Browsing, searching and filtering data, information and digital content
  - 1.2 Evaluating data, information and digital content
  - 1.3 Managing data, information and digital content
- 2. Communication and collaboration
  - 2.1 Interacting through digital technologies
  - 2.2 Sharing through digital technologies
  - 2.3 Engaging in citizenship through digital technologies
  - 2.4 Collaborating through digital technologies
  - 2.5 Netiquette
  - 2.6 Managing digital identity
- 3. Digital content creation
  - 3.1 Developing digital content
  - 3.2 Integrating and re-elaborating digital content
  - 3.3 Copyright and licenses





## 4. Safety

- 4.1 Protecting devices
- 4.2 Protecting personal data and privacy
- 4.3 Protecting health and well-being
- 4.4 Protecting the environment

# **ASSIGNMENTS**

# MODULE 1 - ASSIGNMENT 1

Plan a one-day trip for the older adults you care for. Prepare a programme, illustrated with pictures. Include a few words about the main sights, to raise interest. Insert a map marking the places you are going to visit. Also insert a link (or more) to another webpage (e.g. giving more detail about a location).

#### Method of submission:

Prepare the programme in a format you prefer (e.g. Word). When ready, click on the Add submission button, upload your file and write a short message, including some words about the tasks - did you find it easy? If you had problems, how did you overcome them?

#### Evaluation criteria:

- Content is motivating 4 points
- Style and format are adequate for older people 4 points
- Images and a map are inserted 4 points
- Link to another site is available and working 3 points

# MODULE 1 - ASSIGNMENT 2

#### Task 1

At your workplace you are keeping in touch with more older adults. Many of them live in a remote part of your district, so you use ICT devices more and more frequently to communicate with them. Now one of their children reports the following problem to you: They has taken a job abroad and would like to keep contact with and control the supervision of their parent in the best way.

Suggest more possibilities to keep in touch and to ensure supervision besides phoning. List arguments for the suggested methods and devices. What may be their benefits and drawbacks?





#### Task 2

An older person you care for was given a surprise by their children when they booked a package holiday for them. They learnt that a passport may be required for the holiday. Help them to collect the necessary information and plan other relevant tasks.

Show them how administrative tasks may be done via electronic ways:

- making appointment for acquiring documents (e.g. passport) at the governmental department
- searching for information about the required documents for the holiday and other official information on the website of the Ministry of Foreign Affairs
- checking out the necessary information and offers for the holiday on the website of the company that organizes the holiday

They may want to share pictures with friends after the holiday.

Show at least two ways of sharing images online.

### Method of submission:

Prepare a Word document with the following sections:

Section 1: Task 1 - Ways to keep in touch

Suggest more possibilities to keep in touch and to ensure supervision besides phoning. List arguments for the suggested methods and devices. What may be their benefits and drawbacks?

Section 2: Task 2 - Preparations for a holiday

- Part 1 Prepare a tutorial for the person you care for on how to access electronic public administration.
- Part 2 Write a guide preferably with screenshots on how to find information about required documents and other practicalities for a holiday - through the website of the Ministry of Foreign Affairs, about two countries (one requiring passport, one without a passport)
- Part 3 Select a package holiday of your choice (suitable for older people) on the website of a tour operator, and include all necessary information about it.
- Part 4 Describe at least 2 websites or some other technologies that can be used for sharing images.

Upload the file into this portal with the file name: Module1\_Comm\_guide\_YourName





When preparing the document, always keep in mind who your audience is and choose your style accordingly.

#### **Evaluation criteria:**

#### Task 1

- 2-3 appropriate suggestions for keeping contact and supervision 4 points
- Correct arguments for and against 6 points

#### Task 2

- Detailed description of electronic public administration 6 points
- Searching for information about a country that requires passport on the website of the Ministry of Foreign Affairs, and about a country that does not require a passport 6 points
- Searching for and downloading detailed information about a certain package holiday on the website of a tour operator company 4 points
- Brief description of 2 websites or some other technologies that can be used for sharing images 4 points

Max points can only be awarded if the communication style and format is adequate for older people.

# **MODULE 1 - ASSIGNMENT 3**

### Part 1:

### Task 1:

Enter the data below into an Excel table. Put the records into alphabetical order, put the dates into the same format. Create a Folder named "personal data" on your computer, and save this table into that folder. Write an e-mail directly to your mentor, attaching the table to it.

# Data to be recorded:

Joseph Right, place of birth: London, date of birth: 25-March-1942 Alex Peterson, Cork, 21-July-1946 Susan Bloom, Chesterfield, 5-December-1950 Peter Star, London, 9th of January, 1951 Hannah Lee, Brighton, 26-June-1948 Paul Miller, London, 6-August-1948 Mary Ann Carpenter, Liverpool, 8th Sep 1949





#### Task 2:

Create an online form (we recommend using Google Forms, but any other application can also be used and is accepted) for the following purposes:

You are organizing a trip. In the webform ask for the name of the participant, ask whether she/he could join or not, if yes, ask them to choose from 3 alternative dates you offer, ask for additional requests/comments. Otherwise you can extend it as you wish.

Share the link to the webform with your mentor.

#### Part 2:

You are planning a birthday celebration event. Create an invitation video (with music) for the older adults you care for. Share its link in this online platform notifying your mentor that you are ready.

# Method of submission:

Excel table to be attached to a direct e-mail to the mentor.

Link to be given in this platform when submitting the assignment for evaluation.

# **Evaluation criteria:**

- Part 1 10 points for the webform, 10 points for the Excel table.
- Part 2 20 points

# **MODULE 1 - ASSIGNMENT 4**

#### Task 1

Explain to an older adult how to recognise "spam".

Check your own Spam folder.

Take a screenshot of a spam.

Highlight typical characteristics that tell you (and especially an older adult) it is a spam.

# Task 2

Demonstrate threats of the digital world.

Share a story (anonymously) that happened in the past to you or to one of the people you care for, and that is connected to the topics covered in the Safety section. Describe the case: what did the user





notice, what steps were taken. Give a summary: was it the best way to handle the issue or would you suggest to act differently next time?

# Method of submission:

Complete each task using the attached Word template.

Upload the file to this portal with a file name: security\_yourname.

#### **Evaluation criteria:**

Task 1 - 5 points

Screenshot of a spam is inserted.
At least 3 characteristics are highlighted.

Task 2 - 10 points

Description of the case is clear.

Topic is connected to IT safety.

Contains suggestions for effective handling of the demonstrated issue.





# **MODULE 2: ACTIVE AND HEALTHY AGEING**

#### AIM OF THE MODULE

Now-a-days there are no longer any doubt as to the economic, fiscal and social impact of long-term demographic change.

The aim of the module is raising awareness on the sustainability challenge of ageing society all over the world. The module will give an overview about the social and economic impacts of the demographic changes, and on the strategies developed by the governments to overcome the global challenges. The participants will understand the new vision of ageing, the concept of "active ageing", "assisted living" and the new paradigm of integrated care promoting healthy ageing and independency through self-care and wellbeing. It will explain the roles of actors who are interacting in social and health care of older adults (relatives, physicians, nurses, formal and informal caregivers), and the potential of information and communication technology (ICT), aimed to unburden the care givers and help to meet the fundamental human needs (like social and health security) of older adults. Finally, at the end of the module the participants will learn about the importance and the ways of taking care of careers.

#### LEARNING OUTCOMES

After successful completion of this module, the student will be able:

- Explain the background of demographic changes with facts and figures
- Explain the consequences and challenges of the ageing society;
- List the key components of ageing strategies and population policies (Ambient Assisted Living, Active and healthy ageing);
- Understand the potential of connected technology in care and health provisions of the future;
- Explain the importance of new paradigm of perception of older people;
- Describe the needs, requirements for caregiving of the future
- Explain new concept of integrated caregiving;
- Explain the challenges the caregivers are facing, understand how to avoid burnout and what "caring for the carer" mean

# **TOPICS**

- Demographic changes
- Active ageing
- Perception of older adults





Care of caregivers

#### **ASSIGNMENTS**

# **GRADED ASSIGNMENT - MODULE 2**

Choose one of the 5 topics below, and write down your experiences (national and local), according to the questions:

I. Justify your choice of the specific topic.

II. Answer the questions related to the topic chosen.

# 1. Active ageing

 Does your country have such a program? DO you have a related policy, program at your workplace, in your environment? Among the people who are cared for do you experience the intention to live an active life?

### 2. Silver economy

 Does silver economy exist in your country? Do older adults really create a new market in e.g tourism or the sale of assistive devices to support healthy ageing? If yes, what is your experience? If not, why is that?

# 3. Negative stereotypes related to older adults

 Is it rightful to talk about mental and physical decline of people over 65? Does prejudice against older adults (ageism) exist in your country?

## 4. Smart devices in senior care

• What kind of digital devices are used in the care of older adults at your workplace or in your family? How widespread is this in your country? Are you familiar with devices (e.g blood pressure monitor, glucose monitor) that sends measurements into a center supervised by doctors? Do older people express their need for TeleCare? Can they afford it?

# 5. Internet usage by people cared for

o In your environment out of 10 older adults over 65, how many are connected to the internet (via PC, tablet or smart phone)? What is the most typical activity they





perform on the net (Facebook, reading the news, watching a movie, keeping contact with the children, etc.)? Can the internet help prevent isolation, feeling lonely? Do you think it is true that soon we can talk about addiction among older adults as well?

III. Give at least 3 references to national professional articles and/or internet resources related to the topic of your choice.

**Length:** about an A/4 sheet

# **Evaluation criteria:**

Justification of choice of topic: 4 pointsExperiences presented: 12 points

• At least one reference: 4 points

Total: 20 points

Assignment will be evaluated by your mentor.





### **MODULE 3: ASSISTIVE TECHNOLOGIES**

#### AIM OF THE MODULE

The aim of this module is to introduce internationally and locally available telecare devices for senior care, in the categories of:

- 1. Communication and engagement
- 2. Home safety and security
- 3. Health and wellbeing
- 4. Learning contribution

#### LEARNING OUTCOMES

By the end of the module participants will become familiar with selected telecare devices and applications available worldwide and locally.

They will be able to evaluate these based on the needs of older adults, and will also be able to teach people to use these devices and applications, and give them support while using it.

# **TOPICS**

- Devices and applications available worldwide
- Locally available devices and apps

# **ASSIGNMENTS**

# **GRADED ASSIGNMENT - MODULE 3**

#### Task 1:

Download a communication app to your smartphone or tablet and prepare a screenshot showing the icon of the app on your screen. Insert this screenshot into a Word document.

#### Task 2:

Choose one of the options below and submit your answer online to your mentor.

# Option A

Choose one device or application from the ones presented in this module that you find useful. Analyse its functions and benefits it could offer to older people and their caregivers.





# Option B

If you have already used any of the devices or applications presented in this module, please share your experiences.

# Method of submission:

Create a Word document, for Task 1, insert the screenshot, for Task 2 work on one of the options (max. one page). When ready, click on the "Add submission" button and upload the document you prepared. Finally remember to click on "Save changes".

# **Evaluation criteria:**

- Downloading app, creating and inserting screenshot: 15 points
- Benefits of a device selected from the course or already used from the older people's point of view: 10 points
- Benefits of a device selected from the course or already used from the carer's point of view:
   10 points





# **MODULE 4: VIRTUAL COMMUNITIES**

#### AIM OF THE MODULE

The aim of the module is to show how ICT (information communication technology) can help older adults connect with their friends, families, and care network. The goal is to maintain and improve their independence as well as their physical, cognitive, mental and social well-being.

Ageing is often associated with a reduced ability to engage in the community both for the older person and, often, for their carers. The result of this reduced ability can be social isolation and exclusion which is a cause for concern. There is however, growing evidence of the individual and collective benefits of participation in the local community and society in general, especially in the area of health and well-being and the associated impact on mortality and morbidity. This is where new technologies can help, by **establishing virtual (i.e. online) communities**. These link people through a variety of communication channels that help them stay in touch, be informed about the current circumstances of older adults, and be able to provide assistance as and when required.

# LEARNING OUTCOMES

By the end of the module you will be able to **review**, **set-up** and **maintain** the **live** and **virtual network** of the older people you care for, to ensure their active ageing and fulfilment of fundamental human needs. You will be able to **map** the **existing network** of older people and will be able to **select** the **rights** tools (real time or virtual) to improve and maintain their social network.

By the end of the module you will also understand what the concept of virtual communities means, the various forms they can take, and the **advantages and disadvantages** that are associated with them.

You will be able to set up social networks and **use the associated applications confidently**, which includes: creating a new account, logging in, posting different types of media (text, photos, videos), establishing and joining social groups, managing contacts, and installing a variety of applications on different devices (e.g. tablets, mobile phones) that provide access to the social networks. You will also be able to exploit more sophisticated applications that support group chats and even conferences where people can talk and share written documents in a virtual online meeting.

### **TOPICS**

- Fundamental human needs
- A little bit of network theory (including case studies)





- The role of social media in senior care
- Social networks (Facebook, Twitter)
- Social technologies (Viber, WhatsApp)

# **ASSIGNMENTS**

#### **GRADED ASSIGNMENT - MODULE 4**

### Part 1

Choose a person you're taking care of or one of your older family members and outline his/her connection network (you might do it free handed as well but consider scanning it or taking a photo of it in order to insert it into the document). Introduce the tools and technology actually being used by him or her to keep contact.

Briefly analyse his or her current network of relationships describing it as weak or strong, stable or not stable. Make suggestions for the possible further development of the network and the technologies that can help maintaining and increasing virtual relationships.

#### **Evaluation criteria:**

• Mapping the network of relationships: 6 points

Analysis: 5 points

• Suggestions for development: 4 points

# Part 2

Carry out an experiment to try a tool or an application that has been introduced during the course with a person you're taking care of or with one of your older family members or an acquaintance of yours. Here are some ideas to boost your mind:

- you might help them create a Facebook account and find connections, or
- you might show them how to use Skype and you can demonstrate it by calling a friend or a family member together;
- you might create an email account together and you might teach them how to use it;
- if they've got a smartphone you might download WhatsApp on it so you can show them how to use it;





- in case they've already been using the internet, you might show them new ways of building more connections and online learning, etc.;
- you might create a closed group for those being cared of by you to communicate with them and then you can summarize what you have experienced while doing so.

Of course, any other topic can be focused on - the only point is to include older adults in it and that it should be related to one of the major topics of the course (technology, building virtual communities)

### **Evaluation criteria:**

Evaluating the experiment from the aspects given in the Word template: **20 points** 

Total: **35 points** 

#### Method of submission:

The answer for Part 1 should be written in a Word document with inserting the relationship network as an image into it.

In Part 2 use the attached Word template and cover up your experiences based on the questions and aspects in it (Download the template and put your answers in the template).

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