



# Promoção de Competências para o Envelhecimento Saudável - Projeto SIENHA

**António Alves Lopes<sup>1\*</sup>, Patrícia Almeida<sup>1</sup>, Hugo Santos<sup>1</sup>, Elisabete Martins<sup>1</sup>, Maria da Lapa Rosado<sup>1</sup>,  
Isabel Guimarães<sup>1</sup>, Patricia Paquete<sup>1</sup>, Elena Carrillo<sup>2</sup>, Meike van Scherpenseel<sup>3</sup>, Armi Hirvonen<sup>4</sup>,  
Christian Gruneberg<sup>5</sup>, Mariusz Kozakiewicz<sup>6</sup>, Endrit Nimani<sup>7</sup>**

<sup>1</sup>Escola Superior de Saúde do Alcoitão, Estoril, Portugal

<sup>2</sup> Blanquerna School of Health Sciences - Ramon Llull University, Barcelona, Espanha

<sup>3</sup>HU University of Applied Sciences, Utrecht, Países Baixos

<sup>4</sup>JAMK University of Applied Sciences, Finlândia

<sup>5</sup>HSG Bochum University of Applied Sciences, Bochum, Alemanha

<sup>6</sup>Nicolaus Copernicus University, Polónia

<sup>7</sup>Heimerer College, Kosovo



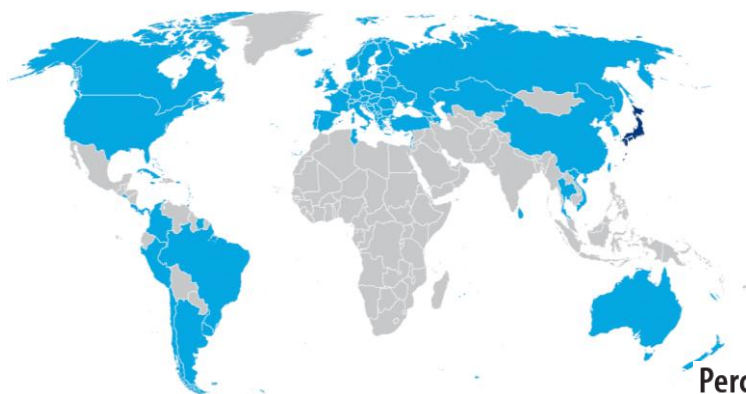
sienha

Strategic Innovative Educational Network  
for **Healthy Ageing**

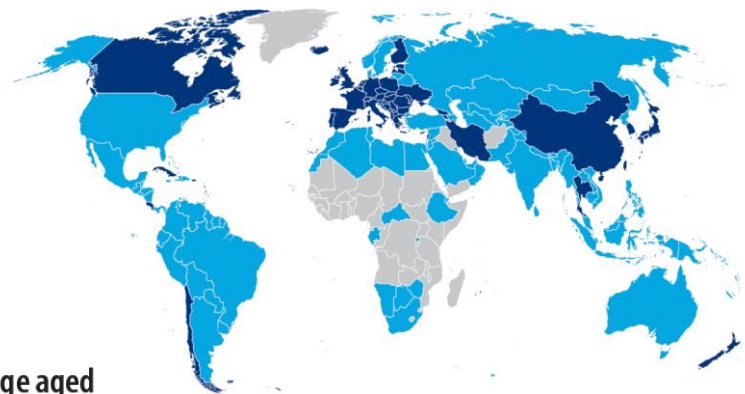


Co-funded by the  
Erasmus+ Programme  
of the European Union

2020-1-ES01-KA203-085121



2015



2050

Percentage aged  
60 years or older:

- 30% or more
- 10 to <30%
- <10%



sienha

Strategic Innovative Educational Network  
for **Healthy Ageing**



Co-funded by the  
Erasmus+ Programme  
of the European Union

2020-1-ES01-KA203-085121

## O envelhecimento tem muitas faces...





sienha

Strategic Innovative Educational Network  
for **Healthy Ageing**



Co-funded by the  
Erasmus+ Programme  
of the European Union

2020-1-ES01-KA203-085121

O Projecto SIENHA tem como objetivo apoiar o envelhecimento saudável nos países europeus através do desenvolvimento de competências dos profissionais de cuidados sociais e de saúde.





Projeto de cooperação académica multilateral, com a duração de 36 meses, em que participam sete Instituições de Ensino Superior (IES), financiado pelo programa ERASMUS+, que é constituído por quatro produtos intelectuais:

### WP 1

Identificação de um quadro de competências profissionais em envelhecimento saudável.

### WP 2

Desenvolvimento de um currículo em envelhecimento saudável.

### WP3

Desenvolvimento de um *toolkit* de inovação e investigação em envelhecimento saudável.

### WP4

Manual de implementação para o envelhecimento saudável



sienha

Strategic Innovative Educational Network  
for **Healthy Ageing**



Co-funded by the  
Erasmus+ Programme  
of the European Union

2020-1-ES01-KA203-085121

## 1. COUNTRY PROFILES ON HEALTHY AGEING







sienha

Strategic Innovative Educational Network for **Healthy Ageing**



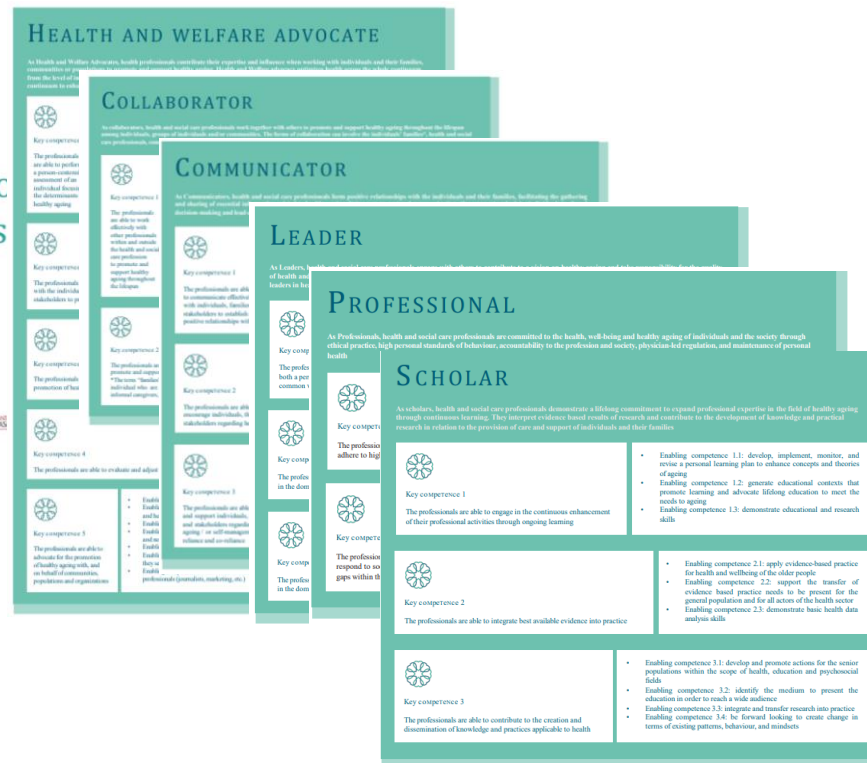
Co-funded by the Erasmus+ Programme of the European Union

2020-1-ES01-KA203-085121



## Framework of competences on healthy ageing

## 2. FRAMEWORK OF COMPETENCES ON HEALTHY AGEING





sienha

Strategic Innovative Educational Network for **Healthy Ageing**



Co-funded by the Erasmus+ Programme of the European Union

2020-1-ES01-KA203-085121

## 3. CURRICULUM ON HEALTHY AGEING

### Module 1

#### Determining healthy ageing intervention

Course Level	EGP *
ECTS and workload	15 ECTS (x 30) per semester
Basic ECTS components for the approved content areas	
Content	100% ECTS
Practical	100% ECTS
Language	English

\* In this area, the content is delivered in all 600 courses, the global issues in population ageing and its implications for major population groups in Europe. In the health sector, there are components of health, population and ageing for action and research based on different health disciplines (health and life sciences, medicine, nursing, psychology, sociology, etc.) and in health and social care, including in various countries, areas and health systems.

EGP (European Graduate Programme) is a system of accreditation that allows universities, independent and dependent, to identify the components and health-related issues that affect healthy ageing. It is a system of accreditation that allows universities and research centres to meet the needs of healthy ageing. It is a system of accreditation that allows universities and research centres to meet the needs of healthy ageing.

#### Course structures and content

**Introduction to the programme**

- Objectives of the programme. The goals of the programme are the... (text continues)

**Healthy Ageing concepts**

The content of the course focuses on the various factors that influence and contribute to healthy ageing, including the role of genetics and the environment. The course will explore the role of genetics and the environment in the process of healthy ageing, and the role of genetics and the environment in the process of healthy ageing.

#### Assessment descriptions and criteria

**Final assignment (70%)**

1. Describing the final assignment that is related with the electrophysiology and other related topics in the course (10%).
2. Health analysis report with the following components (20%) and the presentation (10%).

**Group assignment**

1. Communication with the course leader - healthy ageing, what is it? (10%).
2. Importance of interdisciplinary work. How to assess needs.
3. Presentation of the case study.
4. Discussion of the course and related resources offered during the course, including practical.
5. Communication strategies.
6. Importance of user and family of users.
7. Needs analysis.
8. Description of the community.
9. Specific issues.
10. Self-reflection.

**Continuous portfolio - 30%**

1. Description and presentation of evidence-based practice components.
2. Reflection about the continuous and engagement with the stakeholders.
3. Presentation.
4. Reflection about personal contribution to the group assignment and acquired learning.



## 60 ECTS – Full time (1 academic year) or Part time (2 academic years)

### Real Case (s) study in Community

<b>MODULE 1 – 15 ECTS</b> <b>Determining Healthy Ageing Intervention</b>	<b>MODULE 2 – 15 ECTS</b> <b>Action Plan for Healthy Ageing Intervention</b>	<b>MODULE 3 – 15 ECTS</b> <b>Implementation of Healthy Ageing Interventions</b>	<b>MODULE 4 – 15 ECTS</b> <b>Researching Impact of Healthy Ageing Interventions</b>
<p><b>Content</b></p> <ul style="list-style-type: none"> <li>• Healthy Ageing concepts and models</li> <li>• Project management - Needs analysis</li> <li>• Interprofessional collaboration</li> <li>• Steps of innovation</li> <li>• Technology</li> <li>• Research</li> </ul>	<p><b>Content</b></p> <ul style="list-style-type: none"> <li>• Project management – implementation change model</li> <li>• Interventions in healthy ageing</li> <li>• Plan of action and monitoring</li> <li>• Risk analysis</li> <li>• Steps of innovation</li> <li>• Technology</li> <li>• Research</li> </ul>	<p><b>Content</b></p> <ul style="list-style-type: none"> <li>• Project management – implementation change model</li> <li>• Piloting implementation</li> <li>• Impact measurement</li> <li>• Interactive communication</li> <li>• Citizen science</li> <li>• Steps of innovation</li> <li>• Technology</li> <li>• Research</li> </ul>	<p><b>Content</b></p> <ul style="list-style-type: none"> <li>• Implementation of research in a larger scale of specific dimensions</li> <li>• Research</li> </ul>



sienha

Strategic Innovative Educational Network  
for **Healthy Ageing**



Co-funded by the  
Erasmus+ Programme  
of the European Union

2020-1-ES01-KA203-085121

## 3. INNOVATION AND TEACHING STRATEGIES

The screenshot shows a Prezi presentation slide. At the top left is the Prezi logo and 'Log In' at the top right. The main content area features a background image of an elderly person wearing a VR headset. Overlaid on this image is the title 'Educational Toolkit of innovation and implementation in healthy ageing' and the sienha logo. Below the title are three circular icons: a magnifying glass (Theoretical foundation), a graduation cap (Good Educational Practices), and a person with a book (Teaching methods). A 'User guide' button is visible in the top left corner of the slide content.



sienha

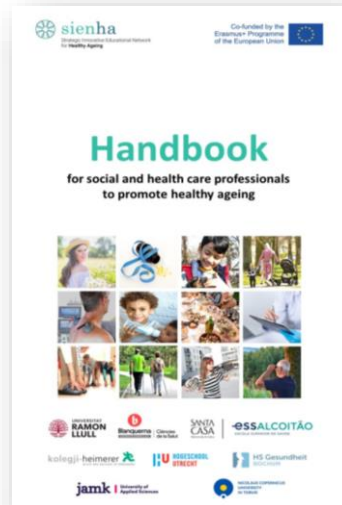
Strategic Innovative Educational Network for **Healthy Ageing**



Co-funded by the Erasmus+ Programme of the European Union

2020-1-ES01-KA203-085121

## 4. HANDBOOK ON HEALTHY AGEING



**Content**

- 1 INTRODUCTION ..... 1
- 2 THE CONTEXT OF HEALTHY AGEING IN EUROPE ..... 3
  - 2.1 The meaning of healthy ageing ..... 3
  - 2.2 Healthy ageing statistics ..... 4
- 3 THE PROCESS OF AGEING ..... 8
  - 3.1 Physical age-related changes ..... 8
  - 3.2 Social and psychological age-related changes ..... 10
  - 3.3 Effective strategies to promote healthy ageing ..... 12
  - 3.4 Healthy ageing strategies and policies in community and society levels ..... 15
- 4 OPPORTUNITIES AND CHALLENGES IN THE PROMOTION OF HEALTHY AGEING ..... 16
  - 4.1 Opportunities in the promotion of healthy ageing in Europe ..... 17
    - 4.1.1 Childhood, school-aged children and adolescents ..... 17
    - 4.1.2 Working age population ..... 19
    - 4.1.3 Older adults ..... 21
    - 4.1.4 Nature and healthy ageing ..... 23
  - 4.2 Challenges in the promotion of healthy ageing in Europe ..... 23
    - 4.2.1 Childhood, school-aged children and adolescents ..... 23
    - 4.2.2 Working age population ..... 25
    - 4.2.3 Older adults ..... 27
  - 4.3 Workforce capacity ..... 29
    - 4.3.1 Workforce expectation across Europe in the social and health care context ..... 29
    - 4.3.2 Higher education and social and health care workforce ..... 31
    - 4.3.3 Older adults, work, pension and participation ..... 33
  - 4.4 Addressing the challenges of healthy ageing – sienha project ..... 35
- 5 COMPETENCE FRAMEWORK TO PROMOTE HEALTHY AGEING ..... 36
  - 5.1 Competency framework construction ..... 36
  - 5.2 Curriculum development and contents across different EQF levels ..... 45
- 6 EDUCATIONAL DESIGN AND PROGRAMME SPECIFICS ..... 47
  - 6.1 Programme learning outcomes (PLOs) ..... 48
  - 6.2 Educational structure ..... 51
  - 6.3 Educational design ..... 52
    - 6.3.1 Processes for the implementation of change and innovation ..... 52
    - 6.3.2 Contextualised and meaningful learning ..... 55
    - 6.3.3 Evidence-based body of knowledge ..... 55
- 7 EDUCATIONAL STRATEGIES ..... 56
  - 7.1 Didactics ..... 56
  - 7.2 Assessment ..... 56
  - 7.3 General rules for obtaining ECTS Credits ..... 57
    - 7.3.1 Course Outline Description Module 1: Determining healthy ageing intervention ..... 59
    - 7.3.2 Course Outline Description Module 2: Plan for healthy ageing interventions ..... 64
    - 7.3.3 Course Outline Description Module 3: Implementation of healthy ageing intervention ..... 67
    - 7.3.4 Course Outline Description Module 4: Researching impact of healthy ageing interventions ..... 72
- 8 EDUCATIONAL TOOLKIT OF INNOVATION AND IMPLEMENTATION IN HEALTHY AGEING ..... 75
  - 8.1 Good Educational Practices ..... 76
    - 8.2.1 Theoretical foundation of innovation and implementation research methods ..... 79
    - 8.2.2 Development phase ..... 81
    - 8.2.3 Implementation phase ..... 83
    - 8.3 Teaching methods ..... 84
    - 8.4 Teaching methods in practice ..... 84
    - 8.5 User guide Toolkit ..... 89
- 9 CLOSING AND NEXT STEPS ..... 92
- 10 REFERENCES ..... 94
- APPENDICES ..... 112
  - Appendix 1: Module assessment, Module 1: Determining healthy ageing intervention ..... 112
  - Appendix 2: Module assessment, Module 2: Plan for healthy ageing interventions ..... 114
  - Appendix 3: Module assessment, Module 3: Implementation of healthy ageing intervention ..... 116
  - Appendix 4: Module assessment, Module 4: Researching impact of healthy ageing interventions ..... 118
  - Appendix 5: An insight into the Good Educational Practices (GEPs) ..... 120
  - Appendix 6: Detailed description of theories, models, and frameworks regarding innovation and implementation research ..... 127
  - Appendix 7: Keywords search strategy teaching methods for innovation and/or implementation education ..... 135
  - Appendix 8: Teaching methods ..... 136

**APPENDICES**

- Appendix 1: Module assessment, Module 1: Determining healthy ageing intervention ..... 112
- Appendix 2: Module assessment, Module 2: Plan for healthy ageing interventions ..... 114
- Appendix 3: Module assessment, Module 3: Implementation of healthy ageing intervention ..... 116
- Appendix 4: Module assessment, Module 4: Researching impact of healthy ageing interventions ..... 118
- Appendix 5: An insight into the Good Educational Practices (GEPs) ..... 120
- Appendix 6: Detailed description of theories, models, and frameworks regarding innovation and implementation research ..... 127
- Appendix 7: Keywords search strategy teaching methods for innovation and/or implementation education ..... 135
- Appendix 8: Teaching methods ..... 136



## Erasmus+

Erasmus Mundus  
Design Measures  
(EMDM)



*European Education and Culture  
Executive Agency*





## sienha

Strategic Innovative Educational Network  
for **Healthy Ageing**



Co-funded by the  
Erasmus+ Programme  
of the European Union

2020-1-ES01-KA203-085121

What is SIENHA? SIENHA Toolkit Team members News Partner area Healthy ageing resources Learning Area  
Transnational project meeting and Multiplier event Contact us

sienha  
Strategic Innovative Educational Network  
for **Healthy Ageing**

### What is SIENHA?

SIENHA is a **European research project** carried out by different universities whose aim is to **support healthy ageing among European countries** through the competence development of **social and health care professionals**, in order to:

 Increase understanding on healthy ageing as a <b>lifetime process</b> requiring increased attention at all phases of life (from childhood to old age).	 Transform understanding and support <b>continuous development of competences</b> of students, teachers and professionals to foster healthy ageing across Europe.
 Support the exchange of knowledge across Europe to <b>learn from the best practices in higher education</b> to develop healthy ageing.	 <b>Increase citizens' knowledge</b> and individuals' involvement in supporting personal health and healthy ageing.

The demographic transition of ageing influences currently all European societies, changing the health status of the population. The European social and health systems and education are inadequately anticipating these challenges, as they cannot react fast enough to provide prevention and adequate promotion of health: health care is often provided by various specialists, service lacking alignment and integration, leading to increasing costs and lower accessibility of health care.

Para mais informações:  
[www.sienha.eu](http://www.sienha.eu)

