



SUBJECT OUTLINE

1. Programme of study description

1.1.	THE "CAROL DAVILA" UNIVERSITY OF MEDICINE AND PHARMACY
1.2.	THE FACULTY OF MEDICINE / THE CLINICAL DEPARTMENT V
1.3.	DISCIPLINE GERIATRICS-GERONTOLOGY II
1.4.	DOMAIN OF STUDY: Healthcare – regulated sector within the EU
1.5.	CYCLE OF STUDIES: BACHELOR'S DEGREE
1.6.	PROGRAMME OF STUDY: MEDICINE

2. Subject description

2.1.	Name of the subject/compulsory subject/elective subject within the discipline: Introduction to geriatrics research and gerontology						
2.2.	Location of the discipline: Saint Luke Hospital for Chronic Diseases						
2.3.	Course tenured coordinator: Luiza Spiru, MD, PhD, University Professor						
2.4.	Practicals/clinical rotations tenured coordinator: Luiza Spiru, MD, PhD, University Professor						
2.5. Year of study	IV	2.6. Semester	1	2.7. Type of assessment	Written exam	2.8. Subject classification	Optional

3. Total estimated time (hours/semester of didactic activity) – teaching module

Number of hours per week	2	Out of which: course	2	Clinical rotation	-
Total number of hours from curriculum	14	Out of which: course	7	Clinical rotation	-
Distribution of allotted time	7 weeks				14 Hours
Study from textbooks, courses, bibliography, and student notes					
Additional library study, study on specialized online platforms and field study					
Preparing seminars / laboratories, assignments, reports, portfolios and essays					
Tutoring					
Examinations					
Other activities					
Total hours of individual study					
Number of credit points					
					2

4. Prerequisites (where applicable)

4.1. of curriculum	Fundamental knowledge regarding the physiologic and pathologic processes of aging. Basic principles of medical scientific research, introduction in Geroscience and Gerotechnology
4.2. of competencies	Physical examination of the geriatric patient, Standardized Geriatric Assessment (SGA), biologic and molecular age diagnostic.

5. Requirements (where applicable)

5.1. for delivering the course	Multimedia projector; Laptop; Demos; Video
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6. Acquired specific competencies

Professional competencies (expressed through knowledge and skills)	At the end of the stage, the student must be acquainted with:
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	<ul style="list-style-type: none"> • Basic knowledge about physiological aging; • The main conditions in geriatrics and gerontology (longevity medicine) – with the involvement of the scientific research • The new technologies of learning and communication for the elderly: ethical notions, the integration of the elderly in the medical and non-medical research; • The technology to delay pathological aging, its use and usefulness (Gerontology)
Transversal competencies (of role, of professional and personal development)	<ul style="list-style-type: none"> - To have the ability to work in a medical team; - To communicate with the patients and their family. <p>To show empathy and behave with professional ethics</p>

7. Subject learning objectives (based on the scale of acquired specific competencies)

7.1. General learning objective	<p>Objectives of the discipline: In an era when, in the medical world, we discuss about the fourth age, knowing and deepening specific pathologies for the elderly patient, the difficulties encountered in setting a correct diagnosis and treatment peculiarities is mandatory.</p>
7.2. Specific learning objectives	<p>Knowledge of the specific battery for GERIATRIC ASSESSMENT, with the Medicine of the “4 P” particularities – within the context of the Longevity Medicine. Use of the Technology for delaying cognitive decline within the context of Active and Healthy aging.</p>

8. Content

8.1. Course	Teaching methods	Observations
<p>Course 1 Morphology and Physiology of Old Age Chapter 1: Quality of Life in the Elderly Patient Chapter 2: Demographics of Aging in Contemporary Populations Chapter 3: Ethical Issues Chapter 4: Elder Abuse Chapter 5: Pharmacology of the Elderly Patient</p>	Lecture: Case Presentation: PowerPoint	2 hours
<p>Course 2 Geriatrics Chapter 1: Definitions and Importance Chapter 2: Geriatrics in the Past, Present, and Future</p>	Lecture: Case Presentation: PowerPoint	2 hours
Course 3 Gerontechnology	Lecture: Case Presentation: PowerPoint	2 hours



Chapter 1: The Importance of Gerontechnology Chapter 2: Gerontechnology and its Supportive Role in the Prevention of Neurocognitive Disorders		
Course 4 The Importance of Gerontechnology in Elderly Care Chapter 1: Existing Smart Devices on the Medical Market Chapter 2: Limitations of Smart Technologies	Lecture: Case Presentation: PowerPoint	2 hours
Course 5 Frailty in the Elderly and Its Objective Measurement Chapter 1: Context, Definition, and Types of Frailty Chapter 2: Pathophysiology of Frailty Chapter 3: Frailty and Cognitive Decline Chapter 4: Multidomain Intervention in Frailty Syndrome	Lecture: Case Presentation: PowerPoint	2 hours
Course 6 The Role of Gerontechnology in Fall Prevention in the Elderly Chapter 1: Falls in the Elderly Chapter 2: Intelligent Systems for Fall Risk Detection in the Elderly Chapter 3: Complications of Falls in the Elderly: Prolonged Immobility Syndrome Chapter 4: Hip Fracture in the Elderly	Lecture: Case Presentation: PowerPoint	2 hours
Course 7 Aging with Dignity in One's Own Home Chapter 1: The Concept of Living in Place Chapter 2: Gerontechnology as a Component of Home Safety Enhancements	Lecture: Case Presentation: PowerPoint	2 hours
Bibliography for course and clinical rotation		
<ol style="list-style-type: none"> 1. The Merck Manual of Geriatrics, Ed. Merck & comp., Whitehouse Station N.J., 2000, Editia an X-a 2. Spiru L, Romosan I, Caraba Al., Timar L.- Geriatrie, vol.I, Ed. Solness, Timișoara, 2002 3. Spiru L., I Romosan - Geriatrie, vol.II, Ed. Solness, 2002 4. Spiru L, Romosan I, Geriatrie-Tratat, Editura, Ana Aslan Intl Academy of Aging, București”, 2004 5. Luiza Spiru, Bruno Vellas, Pierre Jean Ousset - Caiet de observație pentru pacienții cu Boala Alzheimer, Prima Ediție, Editura U.M.F. „Carol Davila”, 2000 6. Luiza Spiru, Bruno Vellas, Pierre Jean Ousset- Caiet de observatie pentru pacientii cu Boala 		



Alzheimer, Editia a II-a, , Editura U.M.F. „Carol Davila”, 2000

7. Luiza Spiru, Bruno Vellas, Pierre Jean Ousset - Teste Clinice pentru Boala Azlheimer, , Editura U.M.F. „Carol Davila”, 2001
8. Luiza. Spiru, I. Romosan, A. Ciocalteu, Gerontonefrologie, Ed. Teora, 1998
9. Luiza. Spiru, I. Romosan, I.C. Sinescu, I. Popescu, Gerontogastroenterologie, Ed. Teora, 1999
10. Luiza Spiru, Bruno Vellas, Pierre Jean Ousset - Teste Clinice pentru Boala Azlheimer, Editura U.M.F. „Carol Davila”, 2001
11. Luiza Spiru, Ioan Romosan Interdisciplinaritatea bolilor renale si digestive, Ana Aslan International Academy of Aging, 2004
12. Luiza Spiru - Managementul bolilor de memorie – Ghid practic, 2006, - ISBN 973 -8611-4-4-2006
13. Luiza Spiru - Scale specifice de evaluare si diagnostic de specialitate, traduse si adaptate in limba romana; Brain Aging International Journal – editie in limba romana, ISSN 1582-8360: Testul MMSE (Mini Mental State Examination), Testul OROLOGIULUI, Scorul activităților vietii cotidiene (ADL), Scorul IADL al activităților curente, SIB (Severe Impairment Batery), NPI (Neuropsychiatric Inventory), ZARIT : Evaluarea sarcinii ajutorului principal, Scorul riscului vascular HATCHINSKI, Evaluarea echilibrului static si dinamic in timpul mersului: Proba Tinetti, Test de fluenta verbala, Clinical Global Impression (CGI).
14. Ghid de practică medicală pentru specialitatea Geriatrie Gerontologie si anexele sale, Evaluarea geriatrica si Foaia de consult geriatic, aprobate prin Ordinul ministrului sanataii Nr. 1454/30.11.2010
15. Curriculum si Syllabus de Medicina Geriatrica-Gerontologica si Psihogeriatrie pentru Specialitatea Medicina de Familie, Conform Decizie Comisia Nationala de Geriatrie Gerontologie a MS, 2011
16. Ghid de buna practică în Ingrijirea la domiciliu și Case Rezidențiale, Conform Decizie Comisia Nationala de Geriatrie Gerontologie a MS, 2011
17. Ioan Romosan, Iosif A. Szucsik, L. Spiru;- Gerontologie 1998, editia a 2-aI. Alexa, L. Spiru, V. Donca - Actualitati in geriatrie;, Ed Gr. T. Popa, U.M.F. Iasi, 2011
18. Spiru L., Romosan I., ”Medicina Longevitatii-TRATAT DE GERIATRIE’’, Ed. Ana Aslan International Academy of Aging Bucuresti, 2018
19. Luiza Spiru, Ioan Romosan - AETERNUS, Tratat de Geriatrie si Medicina Longevitatii, Editura Academiei Romane, Bucuresti, 2020, ISBN 978-973-27-3203-8

9. Corroboration of the subject content with the expectations of the representatives of the epistemic community, professional associations, and major employers in the field of the programme of study

The content of the discipline is by the educational requirements in the field of health to obtain the necessary skills for the training of general practitioners with a high professional qualifications.

10. Assessment

Type of activity	Assessment criteria	Assessment methods	Assessment weighting within the final grade
Course	Theoretical knowledge	Written exam	100%
	Practical knowledge	Written exam	100%

Minimum performance standard

- Assimilation the necessary knowledge for the management of the pathology of the elderly patient and recognizing the theoretical particularities in the recovery of the elderly patient.



**The "Carol Davila" University of Medicine and Pharmacy Bucharest
The Quality Assurance Commission**

Date of filing

**Signature of the course tenured
coordinator**
Prof.Univ.Dr.Spiru Luiza

**Signature of the seminar
tenured coordinator**

**Date of approval in the
Council of the Department:**

**Signature of the Head of the
Department**