Course Specification
Student Version

Course Title:	Elective Course - Geriatric Medicine
Course Code:	ELC 612
Department:	Medicine Department
Program:	Bachelor of Medicine and Surgery
College:	Vision College in Riyadh
Institution:	Vision College in Riyadh
Revised:	July 2025

A. Course Identification

1. Credit hours: 2 (0+0+2)
2. Level/year at which this course is offered: Level 12/Year 6
3. Pre-requisites for this course (if any): COM 408, IMS 408, PHC 408, BCS 408, MDI 408.
4. Co-requisites for this course (if any): None

B. Teaching Methods

1	Case based tutorials
2	Case Based Seminars

C. Course Description and Objectives

1. Course Description

Geriatric medicine is the medical care of older people, many of whom will be frail, and the promotion of better health in old age.

It describes the management of patients presenting with frailty, falls, dementia, delirium, stroke, declining mobility and functional impairment, polypharmacy and multiple co-morbidities.

Geriatricians deal with old-age individuals in acute, in-patient, out-patient and community settings.

2. Course Main Objective

- Practice evidence-based geriatric health care
- Demonstrate clinical reasoning, decision-making & problem-solving skills in geriatric medical practice
- Formulate and implement appropriate management plans for common geriatric medical problems
- Apply the health promotion strategies in this population group

This course pays attention to the perspectives of patients, healthcare professionals, and healthy people who want to improve or maintain their health and wellbeing.

3. Course Objectives

By the end of this course, students should be able to:

- Explain the facts relevant to the risk and etiological factors, the clinical features, and complications of common medical diseases.
- Discuss how people develop and adapt at different stages of life.
- Apply knowledge of major drug interactions and side effects to case scenarios.
- Describe national health care systems including its organization, policies, and procedures.
- Advocate health promotion, wellbeing, and disease prevention.
- Prioritize the differential diagnosis list considering the demographic, social, and occupational characteristics of the patient.

- Design a comprehensive management plan including all therapeutic modalities for disease prevention and health promotion.
- Select and apply the most appropriate and cost-effective diagnostic procedures.
- Follow the professional models of breaking the bad news during clinical performance examination.
- Involve the patient and his family in the choice of the management plan.
- Accept and apply the ethics of end-of-life care.

D. Course Content

No.	List of Topics
1	Introduction
2	Ageing, and the promotion of healthy ageing
3	Diagnosis & management of common geriatric disorders
4	Falls, Frailty & Mobility Disorders in Older Adults
5	Polypharmacy, Drug-related Problems & de-prescribing
6	Cognitive Impairment, Dementia & Delirium
7	Urinary Incontinence & Constipation in Older Adults
8	Palliative & End-of-Life Care & resuscitation protocols
9	Rehabilitation, Functional Recovery & Transition to Home/Social Care
10	Screening programs & Geriatric Health Guidelines
11	Nutrition, Malnutrition & Sarcopenia in Older Adults
12	Depression, Anxiety & Social/Functional Issues in Older Adults
13	Comprehensive geriatric assessment tools

E. Assessment Tools

#	Assessment task	Percentage of Total Assessment Score
1	Assignment evaluation	60%
2	Seminar evaluation Rubric	40%
	Total	**100%**

F. Learning Resources

Essential References	- Brocklehurst's Textbook of Geriatric Medicine and Gerontology, 9th edition, 2025
Supportive References	- Oxford Textbook of Geriatric Medicine (3 ED.) - Adult-Gerontology Practice Guidelines ISBN: 9780826195180, 2016
Electronic Materials	1. LMS resources 2. https://www.Amboss.com

	3. https://www.bgs.org.uk/resurces/topics
Other Learning Materials	None

Course Specification
Student Version

Course Title:	Elective Course - eHealth & Telemedicine
Course Code:	ELC 612
Department:	Medicine Department
Program:	Bachelor of Medicine and Surgery
College:	Vision College in Riyadh
Institution:	Vision College in Riyadh
Revised:	July 2025

A. Course Identification

1. Credit hours: 2 (0+0+2)
2. Level/year at which this course is offered: Level 12/Year 6
3. Pre-requisites for this course (if any): COM 408, IMS 408, PHC 408, BCS 408, MDI 408.
4. Co-requisites for this course (if any): None

B. Teaching Methods

1	Tutorial sessions
2	Seminar presentation

C. Course Description and Objectives

1. Course Description

E. Health & telemedicine refers to the use of technologies to improve well-being, health, and healthcare. It is an umbrella term that captures concepts about the health context, technology, and people. In this elective course, we will provide you with insight into the domain of eHealth, describe methods to develop eHealth, and explain theories that enable behavior change and facilitate implementation. You will also understand how eHealth technologies are used in practice, utilizing a variety of case studies, assignments, and examples. After finishing this course, you will have new knowledge about eHealth, acquire relevant eHealth skills, and gain insight into the use of eHealth in practice.

2. Course Main Objective

The main purpose of this course is to use medical informatics & technology in the healthcare system effectively. This course pays attention to the perspectives of eHealth developers, patients, healthcare professionals, and healthy people who want to improve or maintain their health and well-being.

3. Course Objectives

By the end of this course, students should be able to:

- Describe national health care systems including their organization, policies, and procedures.
- Identify roles and eHealth services (Apps) that are provided by societies and agencies and cooperate with them, where applicable.
- Identify possible benefits and barriers for eHealth & informatics system effectively, including storing and retrieving of information.
- Integrate the information retrieved from relevant sources appropriately and ethically about patient care and health promotion.
- Collaborate, identify the roles of various healthcare professionals involved in patient care, and collaborate with them.

D. Course Content

No.	List of Topics
1	Introduction to e-Health & Telemedicine; Telemedicine history, teleconsultation purposes, and organization International & national regulations in e-health and telemedicine
2	Telecommunication systems and their use in transferring biological and medical data; Telecommunication systems applied to telemedicine. Potentialities, barriers, and applications
3	Organization of health-care systems. Organization, collection, handling, and use of medical data in telemedicine; Medical assistance of remote patients: Benefits & problems
4	Practical application of telemedicine and eHealth: Tele pathology, Tele radiology & imaging, Tele oncology Tele dermatology, Tele pharmacy

E. Assessment Tools

#	Assessment task	Percentage of Total Assessment Score
1	Assignment evaluation	60%
2	Seminar evaluation Rubric	40%
	Total	**100%**

F. Learning Resources

Essential References	e-Health Systems 1st Edition, Theory and Technical Applications, Authors: Joel Rodrigues Sandra Sendra Compte Isabel Díez Hardcover ISBN: 9781785480911 eBook ISBN: 9780081012055 Imprint: ISTE Press - Elsevier
Supportive References	Current Principles and Practices of Telemedicine and E-health Latifi, R. ed., 2008. Current principles and practices of telemedicine and e-health (No. 131). Ios Press.
Electronic Materials	1. LMS resources 2. https://www.classcentral.com/course/ehealth-6876 3. https://www.coursera.org/learn/ehealth/home/welcome
Other Learning Materials	None

Course Specification
Student Version

Course Title:	Elective Course- Infection Control
Course Code:	ELC 612
Department:	Medicine Department
Program:	Bachelor of Medicine and Surgery
College:	Vision College in Riyadh
Institution:	Vision College in Riyadh
Revised:	July 2025

A. Course Identification

1. Credit hours: 2 (0+0+2)
2. Level/year at which this course is offered: Level 12/Year 6
3. Pre-requisites for this course (if any): COM 408, IMS 408, PHC 408, BCS 408, MDI 408.
4. Co-requisites for this course (if any): None

B. Teaching Methods

2	Case based tutorials
3	Case Based Seminars

C. Course Description and Objectives

1. Course Description

This elective course provides sixth-year medical students with comprehensive knowledge and practical insights into infection prevention and control (IPC) in healthcare settings. The course focuses on the principles of transmission of infectious diseases, standard and transmission-based precautions, sterilization and disinfection methods, and outbreak investigation and control.

Students will engage in case-based discussions and seminars to apply infection control measures in real-life clinical scenarios, enhancing their readiness for clinical practice and patient safety. The course also emphasizes antimicrobial stewardship, healthcare-associated infections (HAIs), and the role of healthcare workers in minimizing infection risks

2. Course Main Objective

- To equip students with fundamental principles of infection prevention and control.
- To enhance students' ability to identify and manage healthcare-associated infections.
- To develop clinical reasoning through case-based learning.
- To promote adherence to infection control policies and safe clinical practices.
- To prepare students for safe clinical practice environments.

3. Course Objectives

By the end of this course, students should be able to:

- Describe the specific pathogens, modes of transmission, and risk factors of infectious diseases, and the principles of their prevention
- Explain standard and transmission-based precautions as principles of disease prevention
- Discuss sterilization, disinfection, and the safe and rational use of antimicrobials (antimicrobial stewardship)
- Apply infection control measures in clinical case scenarios of infectious diseases
- Analyze case studies and make decisions on isolation, notification, and infection control strategies
- Demonstrate commitment to patient safety and infection control as an ethical and professional responsibility.
- Demonstrate self-regulation and responsible teamwork ı control practices

D. Course Content

No.	List of Topics
1	Introduction to the course
2	Epidemiology & transmission of infections
3	Standard precautions (hand hygiene, PPE)
4	Transmission-based precautions
5	Healthcare-associated infections (HAIs)
6	Sterilization and disinfection
7	Antimicrobial stewardship
8	Infection control in special units (ICU, OR)
9	Occupational exposure & safety
10	Outbreak investigation
11	Infection control in clinical procedures (IV lines, catheter care, wound care)
12	Post-exposure management & needle-stick injury protocols

E. Assessment Tools

#	Assessment task	Percentage of Total Assessment Score
1	Assignment evaluation	60%
2	Seminar evaluation Rubric	40%
	Total	**100%**

F. Learning Resources

Essential References	Clinical Reasoning in the Health Professions, Joy Higgs (2019) The Thinker's Guide to Clinical Reasoning- Based on Critical Thinking Concepts and Tools 2019
Supportive References	Core Clinical Cases in Medicine and Surgery, A problem-solving approach. Core Clinical Cases in Obstetrics and Gynecology, A problem-solving approach. Core Clinical Cases in Pediatrics, A problem-solving approach. Core Clinical Cases in Psychiatry, A problem-solving approach.
Electronic Materials	1. LMS resources 2. https://www.Amboss.com
Other Learning Materials	None

Course Specification
Student Version

Course Title:	Elective Course-Clinical Reasoning and Critical Thinking in Medicine
Course Code:	ELC 612
Department:	Medicine Department
Program:	Bachelor of Medicine and Surgery
College:	Vision College in Riyadh
Institution:	Vision College in Riyadh
Revised:	July 2025

A. Course Identification

1. Credit hours: 2 (0+0+2)
2. Level/year at which this course is offered: Level 12/Year 6
3. Pre-requisites for this course (if any): COM 408, IMS 408, PHC 408, BCS 408, MDI 408.
4. Co-requisites for this course (if any): None

B. Teaching Methods

2	Case based tutorials
3	Case Based Seminars

C. Course Description and Objectives

1. Course Description

This course is designed to equip medical students with essential skills in clinical reasoning and critical thinking, which are fundamental for effective diagnosis and patient care. Through a combination of theoretical knowledge and practical application, students will learn to systematically analyze clinical data, develop differential diagnoses, and make informed decisions.

2. Course Main Objective

The main purpose of this course is to provide the students with analytical skills and apply Evidence-Based Medicine

3. Course Objectives

By the end of this course, students should be able to:

- Explain the facts relevant to the risk and etiological factors, the clinical features, and complications of common medical diseases.
- Analyze case scenarios of common medical diseases based on evidence-based health care and clinical reasoning.
- Prioritize the differential diagnosis list considering the demographic, social, and occupational characteristics of the patient.
- Design a comprehensive management plan for common medical problems.
- Engage in self-reflection & professional development.
- Exhibit professional attitudes and ethical behaviors of physicians.

D. Course Content

No.	List of Topics
1	Introduction to Clinical Reasoning
2	Diagnostic Reasoning & Clinical Decision Making
3	Managing Uncertainty and diagnostic error in Medicine
4	Core Clinical Cases in medicine, a problem-solving approach
5	Core Clinical Cases in surgery, a problem-solving approach
6	Core Clinical Cases in pediatrics, a problem-solving approach

7	Core Clinical Cases in obstetrics and gynecology, a problem-solving approach
8	Core Clinical Cases in family medicine, a problem-solving approach

E. Assessment Tools

#	Assessment task	Percentage of Total Assessment Score
1	Assignment evaluation	60%
2	Seminar evaluation Rubric	40%
	Total	**100%**

F. Learning Resources

Essential References	Clinical Reasoning in the Health Professions, Joy Higgs (2019) The Thinker's Guide to Clinical Reasoning- Based on Critical Thinking Concepts and Tools 2019
Supportive References	Core Clinical Cases in Medicine and Surgery, A problem-solving approach. Core Clinical Cases in Obstetrics and Gynecology, A problem-solving approach. Core Clinical Cases in Pediatrics, A problem-solving approach. Core Clinical Cases in Psychiatry, A problem-solving approach.
Electronic Materials	1. LMS resources 2. https://www.Amboss.com
Other Learning Materials	None

Course Syllabus

Course Title:	Elective Course- Clinical Nutrition
Course Code:	ELC 612
Department:	Medicine
Program:	Bachelor of Medicine and Surgery
College:	Vision College in Riyadh
Institution:	Vision College in Riyadh
Revised:	June 2025

A. Course Identification

1. Credit hours: 2 (0+0+2)
2. Level/year at which this course is offered: Level 12/Year6
3. Pre-requisites for this course (if any): None
4. Co-requisites for this course (if any): None

B. Teaching Methods

1	Case-based learning
2	Case based seminar

C. Course Description and Main objective

1. Course Description

This course introduces medical students in the clinical phase to the principles of clinical nutrition and its application in patient care. It focuses on nutritional assessment, management of malnutrition, and dietary approaches in common diseases such as diabetes, cardiovascular and renal disorders. The course also covers nutrition in special populations and critical care, with emphasis on evidence-based practice and multidisciplinary collaboration.

2. Course Main Objective

1. Understand the clinical relevance of nutrition in medical practice.
2. Recognize and manage malnutrition in hospitalized and ambulatory patients.
3. Integrate nutritional strategies in the management of major diseases.
4. Discuss enteral and parenteral nutritional support.
5. Apply evidence-based approaches to nutrition in different clinical settings.

D. Course Content

No.	List of Topics	Hours
1	Introduction to Clinical Nutrition	
2	Nutritional Assessment in Clinical Practice	4
3	Malnutrition: Diagnosis, Classification and Clinical Impact	4
4	Medical Nutrition Therapy for Diabetes Mellitus	4
5	Nutrition in Cardiovascular Diseases	4
6	Nutritional Management in Chronic Kidney Disease	4
7	Nutrition in Gastrointestinal Disorders	4
8	Nutrition and Liver Disease	4
9	Nutrition in Cancer Patients	4
10	Enteral and Parenteral Nutrition	4
11	Nutrition in Critically Ill Patients	4
12	Obesity and Metabolic Syndrome	4
	total	45

E. Assessment tools

#	Assessment task	Percentage of Total Assessment Score
1	**Assignment evaluation**	**60%**
2	**Seminar evaluation Rubric**	**40%**
	Total	**100%**

F. Learning Resources

Essential References	• Krause's Food & the Nutrition Care Process 15th Edition, Elsevier, 2020. A foundational text for clinical nutrition, covering assessment, nutrition care process, and disease-specific interventions. • Clinical Nutrition, by Michael J. Gibney et al. Elsevier Health Sciences. • Comprehensive coverage of nutrition science with clinical relevance for medical students.
Supportive References	•Nutrition and Diagnosis-Related Care, Sylvia Escott-Stump. 9th Edition, Wolters Kluwer, 2021. Offers practical dietary strategies and case-based guidance aligned with disease conditions. •Manual of Clinical Nutrition Management, Morrison Healthcare. A practice-focused resource on hospital nutrition protocols and calculations. •ESPEN Guidelines on Clinical Nutrition Clinical recommendations for nutrition support in various diseases and special populations.
Electronic Material	•ESPEN Official Website https://www.espen.org/guidelines-home/espen-guidelines •ASPEN (American Society for Parenteral and Enteral Nutrition) https://www.nutritioncare.org •Elsevier's Clinical Key Platform (University Subscription Recommended) https://www.clinicalkey.com •UpToDate: Nutrition in Clinical Care (for evidence-based point-of-care use) https://www.uptodate.com