

# **MEDICAL PATHOLOGY SYLLABUS**

**FOR ASSOCIATE NURSING PROGRAM**

**SENIOR 5 - 6**

**FIRST EDITION**

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# FOREWORD

The Ministry of Education, through the Rwanda Basic Education Board (REB) has initiated the Associate Nursing Program at the second cycle of secondary education. The underlying principle behind the introduction of this program is to ensure that the curriculum responds to the needs of the learners, the society, and the labour market.

Medical Pathology is one of subjects of Associate Nursing Program that emphasizes on equipping the learners with required knowledge, skills, and attitudes and values required for high-quality nursing care. This aligns with Rwanda Vision 2050, which focuses on improving the country's socio-economic status through health care.

It is only the healthy people who can significantly play a major role in this socio-economic transformation journey. Medical Pathology subject teach the theories, principles, and procedures on which the nursing practice depends.

I extend my sincere appreciation to all those involved in developing this syllabus, especially the Ministry of Health in collaboration with REB, who coordinated the entire process from start to the end. Feedback and suggestions for future revisions of this syllabus are welcome.

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# ACKNOWLEDGEMENT

I would like to express my deep gratitude to everyone who contributed to the development of this syllabus. The project would not have succeeded without the support of numerous stakeholders. I extend special thanks to the Ministry of Health for leading the development process. My appreciation also goes to the Health Workforce development staff/MoH, REB staff, University of Rwanda, College of Medicine and Health Sciences, Staff from Health Private training institutions, Teaching hospitals, Level Two Teaching hospitals, district hospitals, National Council of Nurses and Midwives (NCNM), and Secondary schools having Associate Nursing program. Additional thanks are due to the Ministry of Health, the Ministry of Education, and the Clinton Health Access Initiative (CHAI) for their financial support.

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# 1. GENERAL INTRODUCTION

## 1.1. Background on introduction of the Associate Nursing Program in secondary schools

For a long time ago, nursing education around the World has taken different steps from the traditional apprenticeship, vocational, and hospital-based training model to a higher education academic model of teaching and learning (Gaberson & Oemann, 2010). This paradigm shift was driven by the increased demand of the professionalization of nursing, the changing illness patterns, and the expansion of the knowledge-based society requiring more improved and innovative education preparation of nursing professionals that is adapted to the context and specific health needs (Yam, 2004).

In Rwanda, the above-mentioned transformations in nursing education evolved overtime. Healthcare education in general started in 1933 with medical assistants “Assistants Médicaux” program, followed by the assistant midwives “Auxiliaires accoucheuses” in 1949 (Harelimana, et., 2015). From 1954 up to 1979, the A2 and A3 programs were established at secondary level. From the academic year 1979 to 2004, the program of nursing education was exclusively “A2” secondary level (Kabgayi School of Nursing and Midwifery, 2013). Nurses were mostly prepared for hospitals and health center-based healthcare provision, leaving out the community. This gap was later addressed by introduction of the Community Health Workers (CHWs) in 1995 (MoH, 2012).

The Cabinet resolution of October 27<sup>th</sup>, 2004 phased out the A2 nursing program. A transition period was decided to move from nursing program A2 to Nursing Program A1 up to 2007. This was in the purpose to train more nursing professionals at a tertiary level in order to produce highly-qualified professionals, thus improving the quality health care delivery. However, gaps in providing basic nursing care at different levels were continually observed.

Fourteen years later after the closure of A2 nursing program, the Government of Rwanda has decided to introduce Associate Nursing Program as provided by the Article 58 of the Rwandan Law Determining Organization of Education No 10/2021 of 16/02/2021 (MoE, 2021).

Therefore, the associate nursing program is being introduced to provide the support needed in basic nursing care provision, with capacity to progress in different advanced health care professions. This decision aims to meet the current and contextual health needs that present high demand to provide the basic nursing care at different levels of the Rwanda healthcare system, particularly in the community.

## Associate nurse leaver's profile

Upon completion of the associate nursing program, learner should have acquired knowledge, skills and attitudes to:

1. Provide support to individuals, families, groups, and communities when faced with unwelcome news and life changing diagnoses;
2. Provide health education within her/his scope of practice;
3. Demonstrate understanding of the determinants of health that affect individuals, families, groups, and communities;
4. Demonstrate understanding of basic common health conditions affecting individuals of all age groups and their basic nursing care;
5. Assess individuals, families, groups and community health needs and provide basic nursing care using evidence-based practice;
6. Collaborate effectively with multidisciplinary team members, clients and stakeholders in provision of basic nursing care;
7. Demonstrate value of responsibility and accountability, commitment and patriotism in serving the nation ;
8. Ensure the privacy, confidentiality, dignity and safety of individuals is maintained at all times;
9. Provide support on basic care in reproductive, maternal, neonatal and child health
10. Explain scientific phenomena using correct scientific terminologies;
11. Demonstrate knowledge and skills required to progress to higher learning education;
12. Express themselves fluently, and with confidence, in speaking and writing using correct vocabulary and grammar appropriately;
13. Perform experiments using a range of scientific and medical tools and equipment and draw appropriate conclusions;
14. Demonstrate ability to manage data (collect, recording, processing, analysis, synthesis, and reporting) for appropriate decision



## **2. TEACHING AND LEARNING MEDICAL PATHOLOGY**

### **2.1. Rationale of teaching and learning medical pathology**

Medical pathology subject is one of professional subjects specific to the Associate Nursing Program.. The aim of the Medical pathology subject is to equip the learners with knowledge, skills, and attitudes that are required for the management of patients with medical conditions. The Medical pathology subject is a competence-based like other subjects of Associate nursing program.

Inclusion of medical pathology subject serves to equip the learner with knowledge and appropriate skills and attitudes for the management of patients with medical conditions affecting human body systems including respiratory, cardiovascular, gastrointestinal, and urogenital, sensory, endocrine, and neurological body systems. Medical pathologies are among the most frequent health conditions that are observed in daily clinical consultations at all levels of the health care system. The subject equips the associate nurse with critical thinking skills that are needed to assess a patient's medical conditions, make an informed nursing care plan, and appropriate decision to resolve client problems. In Rwanda, the associate nurse is on the frontline contact with clients at different levels of the health care system. This subject enables the associate nurse to identify client problems that present the highest level of emergencies, in order to provide the best orientation. Minor client's health problems are resolved by the associate nurse; the major ones are referred as needed without delay.

#### **2.1.1. Medical pathology and society**

Teaching and learning medical pathology is critical for establishing a foundation for nursing care and services delivery that are needed for better health, towards achievement of the Sustainable Development Goals (SDGs) of the 21st century.

Medical pathology constitutes an important component of nursing care delivery. This because medical health conditions are among the most frequent health conditions in daily clinical consultations at all levels of health care system. Medical pathology subject empowers the associate nurse with critical thinking skills that are needed to identify patient's Medical pathology needs and take appropriate decision to resolve client problems.

In Rwanda, the associate nurse is on the frontline contact with clients at different levels of health care system. This subject enables the associate nurse to identify client problems that present the highest level of emergencies, in order to provide the best orientation. Client with Minor health conditions are resolved by the associate nurse.

The inclusion of Medical pathology subject in upper-secondary basic education for Associate Nursing Program is justified by the fact that, not only it aims to resolve most frequent health care problems, but also it complements other associate nursing program subjects that will be mostly needed the time the associate nurse will be in services delivery.

### **2.1.2. Medical pathology and learners**

Learners have to be prepared from an early age for active and accountable health care provider with highest sense of quality. With this regard, the Medical pathology aims to equip learners to understand and situate health care delivery in their cultural, environmental, economic, political and social contexts. At the center of teaching and learning of Medical pathology, hands on activities will play a key role, which in turn, should contribute significantly towards improving learners' achievement, motivation, and mastery of patient problems identification and solving

## **2.2. Competences**

Competence is defined as the ability to use an appropriate combination of knowledge, skills attitudes, values and behavior to accomplish a particular task successfully.

Basic competences are addressed in the stated broad subject competences and in objectives highlighted year on year basis and in each of units of learning. The generic competencies, basic competences that must be emphasized and reflected in the learning process are briefly described below and teachers will ensure that learners are exposed to tasks that help the learners acquire the skills.

### **2.2.1. Generic competences**

**Critical and problem-solving skills:** The acquisition of such skills will help learners to think imaginatively, innovatively and broadly to evaluate and find solutions to problems encountered in our surrounding.

- **Creativity and innovation:** The acquisition of such skills will help learners to take initiatives and use imagination beyond knowledge provided in classroom to generate new ideas and construct new concepts.
- **Research:** This will help learners to find answers to questions based on existing information and concepts and use it explain phenomena from gathered information.
- **Communication in official languages:** Teachers, irrespective of being language teachers will ensure the proper use of the language of instruction by learners. The teachers should communicate clearly and confidently and convey ideas effectively through spoken and written by applying appropriate language and relevant vocabulary.
- **Cooperation, interpersonal management and life skills:** This will help the learner to cooperate as a team in whatever task assigned and to practice positive ethical moral values and while respecting rights, feelings and views of others. Perform practical activities related to environmental conservation and protection. Advocate for personal, family and community health, hygiene and nutrition and responding creatively to a variety of challenges encountered in life.
- **Lifelong learning:** The acquisition of such skills will help learners to update knowledge and skills with minimum external support. The learners will be able to cope with evolution of knowledge advances for personal fulfilment in areas that are relevant to their improvement and development.

### 2.2.2 Broad Medical pathology Competences

The overall objective of learning medical pathology at upper-secondary basic education level is to equip learners with appropriate medical pathology skills. Upon completion of this level, learners will have acquired competences (knowledge, skills and attitudes) which will enable them to:

1. Take appropriate decision on different common medical pathologies of respiratory, cardiovascular, gastrointestinal, and genitourinary systems;
2. Take appropriate decision on different common medical pathologies of Sensory organs, Endocrine, and neurological systems.

### 2.2.3. Medical pathology and Developing Competences

The national policy documents based on national aspirations identify some ‘basic competences alongside the ‘Generic competences’ that will develop higher order critical thinking skills and help student learn medical pathology, as an important component of patient care. The nature of learning activities which are mainly inquiry oriented contribute to the achievement of those competencies.

Through observations, experimentation, and presentation of information during the learning process, the learner will not only develop deductive and inductive skills but also acquire caring skills from case-based learning, exposure of associate nurse learners to the skills laboratory and performs specific tasks prior to actual patient care. This will equip the learners with cooperation and communication skills, critical thinking and problem-solving skills in this regard.

This will be achieved through learner group work and cooperative learning of medical pathology, which in turn will promote interpersonal relations and teamwork. The manipulation of apparatus and data during class presentations and undertaking of simulated nursing care practice by learners will involve analytical and problem-solving skills directed towards medical pathology, identifying patient health needs, plan, implement, and evaluate required intervention according to their scope of practice.

The acquired knowledge and skills in medical pathology should develop a responsible and accountable associate nurse who adapts to scientific reasoning and attitudes and develops confidence in reasoning independently. The learner should show concern of individual attitudes, environmental protection and comply with the scientific method of reasoning. The scientific

method should be applied with the necessary rigor, intellectual honesty to promote critical thinking while systematically pursuing the line of thought.

## 2.3. Pedagogical Approach

Learners learn best when they are actively involved in the learning process through a high degree of participation, contribution and production. At the same time, each learner is an individual with their own needs, pace of leaning, experience and abilities. Teaching strategies must therefore be varied but flexible within well-structured sequences of lessons. Learner-centered education does not take the teacher’s responsibility of screening of seeing weather learning takes place properly.

### 2.3.1. Role of the learner

The approach considers the learning process to involve the construction of meaning by learners and behavior change for professional practice as whole, and quality basic nursing care improvement in particular. In the syllabus, learners are in the driver's seat which implies they will construct their knowledge by posing question, planning investigation, conducting their own experiments, analyzing and communicating results. Moreover, the learning by doing will trigger the Medical pathology performance. Specifically, when engaging in inquiry, learners will describe objects and events, ask questions, construct explanations, test those explanations against current scientific knowledge, and communicate their ideas to others. They will be exposed to practical simulated patient care. By so doing, the learners will take ownership of the learning process and apply the acquired skills in real patient care environment.

Moreover, the learners' activities are indicated against each learning unit reflecting their appropriate engagement in the learning process. These include:

- Pursuing questions which they have identified as their own even if introduced by the teacher;
- Observing different social group behavior
- Taking part in selecting appropriate clinical case studies for learning objectives
- Developing and using skills of gathering data by history taking and physical examination
- Working collaboratively with others, communicating their own ideas and considering others' ideas
- Expressing themselves using appropriate professional terms and representations in writing and talk.
- Engaging in lively public discussions in defense of their work and explanations;
- Applying their learning in real-life contexts.

During this reciprocal interaction, what learners will acquire is not only content knowledge, but also a number of skills including how to approach a problem, identify important resources, analyze and interpret data, and take clinical decision.

### **2.3.2. Role of the teacher**

The role of the teacher will remain critical. However, instead of being the “sage on the stage”, the teacher will rather be “the guide on the side” who acts as facilitator in a variety of ways which include:

- Providing the learning materials to students
- Guide students how to consult/use the learning materials
- Encouraging and accepting student autonomy and initiative;
- Using medical terminology when formulating clinical case studies;
- Allowing student responses to drive lessons, shift instructional strategies, and alter content;
- Familiarizing her/ himself with students’ understandings of concepts before sharing their own understandings of those concepts;
- Encouraging students to engage in dialogue, both with the teacher and one another;
- Encouraging student inquiry by posing thoughtful, open-ended questions and asking students to question each other;
- Engaging students in experiences that pose contradictions to their initial hypotheses and then encouraging discussion.
- Ensuring that cross-cutting issues are addressed in teaching and learning process

### **2.3.3. Special needs education and inclusive approach**

All Rwandans have the right to access education regardless of their different needs. The underpinnings of this provision would naturally hold that all citizens benefit from the same menu of educational programs. The possibility of this assumption is the focus of special needs education. The critical issue is that we have persons/ learners who are totally different in their ways of living and learning as opposed to the majority. The difference can either be emotional, physical, sensory and intellectual learning challenged traditionally known as mental retardation.

These learners equally have the right to benefit from the free and compulsory basic education in the nearby ordinary/mainstream schools. Therefore, the schools' role is to enroll them and also set strategies to provide relevant education to them. The teacher therefore is requested to consider each learner's needs during teaching and learning process. Assessment strategies and conditions should also be standardized to the needs of these learners. Detailed guidance for each category of learners with special education needs is provided for in the guidance for teachers.

## 2.4. Assessment Approach

Assessment is the process of evaluating the teaching and learning processes through collecting and interpreting evidence of individual learner's progress in learning and to make a judgment about a learner's achievements measured against defined standards. Assessment is an integral part of the teaching learning processes. In the new competence-based curriculum assessment must also be competence-based; whereby a learner is given a complex situation related to his/her everyday life and asked to try to overcome the situation by applying what he/she learned. Assessment will be organized at the following levels: School-based assessment, District based assessment, and National based assessment

### 2.4.1. Types of assessment

#### a. Formative and continuous assessment (assessment for learning)

Continuous assessment involves formal and informal methods used by schools to check whether learning is taking place. When a teacher is planning his/her lesson, he/she should establish criteria for performance and behavior changes at the beginning of a unit. Then at the end of every unit, the teacher should ensure that all the learners have mastered the stated key unit competences basing on the criteria stated, before going to the next unit. The teacher will assess how well each learner masters both the subject and the generic competences described in the syllabus and from this, the teacher will gain a picture of the all-round progress of the learner. The teacher will use one or a combination of the following: (a) observation (b) pen and paper (c) oral questioning.

### **b. Summative assessment (assessment of learning)**

When assessment is used to record a judgment of a competence or performance of the learner, it serves a summative purpose. Summative assessment gives a picture of a learner's competence or progress at any specific moment. The main purpose of summative assessment is to evaluate whether learning objectives have been achieved and to use the results for the ranking or grading of learners, for deciding on progression, for selection into the next level of education and for certification. This assessment should have an integrative aspect whereby a student must be able to show mastery of all competences

Summative assessment can be internally school based assessment or external assessment in the form of national examinations. School based summative assessment should take place once at the end of each term and once at the end of the year. School summative assessment average scores for each subject will be weighted and included in the final national examinations grade. School based assessment average grade will contribute a certain percentage as teachers gain more experience and confidence in assessment techniques. In the third year of the implementation of the new curriculum it will contribute 10% of the final grade, but will be progressively increased. Districts will be supported to continue their initiatives to organize a common test per class for all the schools to evaluate the performance and the achievement level of learners in each individual school. This is the comprehensive assessment that takes place at all levels of studies. This subject will be part of the External National Examination. External summative assessment will be done at the end of S6 and this will be for both theory and practical examination.

### **2.4.2. Record Keeping**

This is gathering facts and evidence from assessment instruments and using them to judge the student's performance by assigning an indicator against the set criteria or standard. Whatever assessment procedures used, it shall generate data in the form of scores which will be carefully recorded and stored in a portfolio because they will contribute to the remedial actions, for alternative instructional strategy and feed back to the learner to check the learning progress and to advice accordingly or to the final assessment of the students.

This portfolio is a folder (or binder or even a digital collection) containing the student's work as well as the student's evaluation of the strengths and weaknesses of the work. Portfolios reflect not only work produced (such as papers and assignments), but also it is a record of the activities undertaken over time as part of student learning. Besides, it will serve as a verification tool for each learner that



he/she attended the whole learning before he/she undergoes the summative assessment for the subject.

### **2.4.3. Item writing in summative assessment**

Before developing a question paper; a plan or specification of what is to be tested or examined must be elaborated to show the units or topics to be tested on, the number of questions in each level of Bloom's taxonomy and the marks allocation for each question. In a Competence-based curriculum, questions from higher levels of Bloom's taxonomy should be given more weight than those from knowledge and comprehension level.

Before developing a question paper; the item writer must ensure that the test or examination questions are tailored towards Competence-based assessment by doing the following:

Identify topic areas to be tested on from the subject syllabus;

- Outline subject-matter content to be considered as the basis for the test;
- Identify learning outcomes to be measured by the test/exam;
- Prepare a table of specifications;
- Ensure that the verbs used in the formulation of questions do not require memorization or recall answers only but testing broad competences as stated in the syllabus.

#### 2.4.4. Structure and format of the examination

There will be 2 papers in medical pathology subject. Time allocated for paper will depend on its respective weight. The paper will be structured as follows:

##### Component Weighting

COMPONENT	WEIGHTING
Paper: <ol style="list-style-type: none"><li>1. Questions which measures knowledge and understanding(lower order thinking level)</li></ol> <ul style="list-style-type: none"><li>• Structured short answer questions.</li></ul>	Structured short answer questions will have 40% of the final marking of the assessment
<ol style="list-style-type: none"><li>2. Questions which measures skills and advanced level of understanding (higher order thinking level)</li></ol> <ul style="list-style-type: none"><li>• Unstructured answer questions or extended essay questions and practical examination.</li></ul>	Unstructured answer questions will have 60 % of the final marking of the assessment.

#### 2.5. Reporting to parents

The wider range of learning in the new curriculum means that it is necessary to think again about how to share learners' progress with parents. A single mark is not sufficient to convey the different expectations of learning which are in the learning objectives. The most helpful reporting is to share what students are doing well and where they need to improve.

## 2.6. Resources

### 2.6.1. Material resources

For successful implementation of this syllabus the material resources are required. Thus, the following minimum requirement should be met:

- The school and health facilities.
- Equipped skills laboratory for nursing sciences;
- ICT infrastructure including the internet network;
- Library (e-library, videos, textbooks, and other written materials, i.e: syllabus, charts, newspapers, shapes, etc...);
- Improvised teaching aids for simulation.

### 2.6.2. Human resource

The effective implementation of this syllabus needs a joint collaboration of educators at all levels. Given the material requirements, teachers are expected to accomplish their noble role as stated above. However, teachers should be equipped with a pedagogical content knowledge (PCK) and teaching experience. Furthermore, a medical pathology teacher should be a professional nurse, since all techniques covered in this subject are linked with nursing practice.

On the other hand, school directors of studies should be trained on the use of Competence-based syllabus then, they will be able to make a follow-up and assess the teaching and learning of this subject due to their profiles in the schools. Teachers will be trained on the harmonized implementation of this syllabus. These combined efforts will ensure bright future careers and lives for learners as well as the contemporary development of the country.

### **Skills and attitudes required for the teacher of Medical pathology Subject:**

- Engage students in variety of learning activities;
- Apply appropriate teaching and assessment methods;
- Adjust instructions to the level of the learner;
- Creativity and innovation, makes connections/relations with other subjects;
- Show a high level of knowledge of the content;
- Develop effective discipline skills to manage adequately the classroom;
- Good communicator, Guide and counsellor;
- Passion for learners' teaching and learning.

## 3. SYLLABUS UNITS DESCRIPTION

### 3.1. Presentation of the Structure of the syllabus units

Medical pathology subject is taught and learned in upper-level secondary education as a core subject. At every grade, the syllabus is structured in Topic Areas, and then further broken down into Units. The units have the following elements:

1. Unit is aligned with the Number of Lessons;
2. Each Unit has a Key Unit Competence whose achievement is pursued by all teaching and learning activities undertaken by both the teacher and the learners;
3. Each Key Unit Competence is broken into three types of Learning Objectives as follows:
4. Type I: Learning Objectives relating to Knowledge and Understanding (Type I Learning Objectives are also known as Lower Order Thinking Skills or LOTS);
5. Type II and Type III: These Learning Objectives relate to acquisition of skills, Attitudes and Values; Type II and Type III Learning Objectives are also known as Higher Order Thinking Skills or HOTS).
6. Each Unit has a Content which indicates the scope of coverage of what a teacher should teach and learner should learn in line with stated learning objectives.
7. Each Unit suggests Learning Activities that are expected to engage learners in an interactive learning process as much as possible (learner-centered and participatory approach);
8. Finally, each Unit is linked to Other Subjects, its Assessment Criteria and the Materials (or Resources) that are expected to be used in teaching and learning process.

In all, the syllabus of medical pathology for associate nursing program has got 7 topic Areas (Common medical pathologies of respiratory, cardiovascular, gastrointestinal, urogenital, Endocrine, neurological and Sensory body systems). As for units, they are six in S5, and 5 in S6.

## 3.2. Medical pathologies S5

### 3.2.1. Key competences for S5

- Demonstrate understanding of the appropriate management of different common medical pathologies of respiratory system
- Take appropriate decision on different common medical pathologies of cardiovascular system
- Take appropriate decision on different common medical pathologies of Digestive system
- Take appropriate decision on different common medical pathologies of urogenital system
- Take appropriate decision on different common medical pathologies of endocrine system
- Take appropriate decision on different common medical pathologies of neurological system

### 3.2.2. Table units for S5

Topic Area: Management of Medical Pathologies		Sub topic: Medical pathologies of body systems		
MEDICAL PATHOLOGIES S5	Unit 1: Medical Pathologies of respiratory system		Number of Periods: 14	
<b>Key unit Competence:</b> Demonstrate understanding of the appropriate management of different common medical pathologies of respiratory system				
Learning Objectives			Content	Learning Activities
Knowledge and understanding	Skills	Attitudes and values		
<ul style="list-style-type: none"> <li>Define the key concepts of medical pathology</li> <li>List the common medical pathologies of respiratory system</li> <li>Compare the different common pathologies of respiratory system</li> </ul>	<ul style="list-style-type: none"> <li>Interpret the lab investigations for different common medical pathologies of respiratory system</li> <li>Develop a treatment plan for common medical pathologies of respiratory system</li> </ul>	<ul style="list-style-type: none"> <li>Apply ethical principles while caring for clients</li> <li>Maintain a grooming physical appearance while caring for clients</li> <li>Demonstrate accountability and responsibility in everyday activities</li> <li>Team working spirit</li> <li>Demonstrate good communication and collaboration skills</li> </ul>	<p><b>Medical pathology</b></p> <ul style="list-style-type: none"> <li>Description of the selected common medical pathologies of respiratory system (Asthma, Pneumonia and Bronchiolitis):               <ul style="list-style-type: none"> <li>Definition, causes;</li> <li>pathophysiology overview;</li> <li>signs and symptoms of each pathology;</li> <li>Investigations: (Laboratory, Full blood account (FBC);</li> </ul> </li> </ul> <p>Imageries: Chest x- ray)</p> <ul style="list-style-type: none"> <li>Adequate medical diagnosis</li> </ul>	<ul style="list-style-type: none"> <li>In group work learners present anatomical structure of respiratory system and gaze exchange.</li> <li>Group discussion using case studies to outline signs and symptoms, investigations, diagnosis and treatment of each of common pathologies of respiratory system</li> </ul>

			<ul style="list-style-type: none"> <li>• Basic Nursing care to each of common pathology of respiratory system</li> </ul>	
<ul style="list-style-type: none"> <li>• Describe signs and symptoms of common medical pathologies of respiratory system</li> <li>• Enumerate the investigations requested for common medical pathologies of respiratory system</li> <li>• Identify the adequate medical diagnosis common pathologies of respiratory system</li> <li>• Explain the evolution and complications of each common pathology of respiratory system</li> </ul>	<ul style="list-style-type: none"> <li>• Provide basic nursing care for patients suffering from common medical pathologies of respiratory system</li> </ul>		<ul style="list-style-type: none"> <li>• Evolution and complications of each of common pathology of respiratory system</li> </ul>	<ul style="list-style-type: none"> <li>• By watching videos; learners use the available algorithms in management of different common pathologies of respiratory system</li> <li>• In the skills lab, students practice on simulated patients</li> <li>• In real context (health posts, health centers and district hospitals), students practice what learned in theory</li> </ul>

**Links to other subjects:** Human body anatomy and physiology, Health assessment, Fundamental of Nursing, Pharmacology

**Assessment criteria:** Learner undertakes appropriate management decision of different common medical pathologies of respiratory system

**Materials:** Algorithms of management of different pathologies, written case studies on different pathologies; text books with topic related to medical pathologies; and videos, simulated patients ;other simulation lab equipment



<b>Topic Area: Management of Medical Pathologies</b>		<b>Sub -Topic: Medical pathologies of body systems</b>
<b>MEDICAL PATHOLOGIES S5</b>	<b>Unit 2: Pathologies of cardiovascular System</b>	<b>Number of Periods:</b> <b>15</b>

**Key unit Competence:** Take appropriate decision on different common medical pathologies of cardiovascular system

<b>Learning Objectives</b>			<b>Content</b>	<b>Learning Activities</b>
<b>Knowledge and understanding</b>	<b>Skills</b>	<b>Attitudes and values</b>		
<ul style="list-style-type: none"> <li>List the common medical pathologies of cardiovascular system</li> <li>Describe causes, signs and symptoms of common medical pathologies of cardiovascular system</li> <li>Enumerate the lab investigations</li> <li>requested for common medical pathologies of cardiovascular system</li> <li>Identify the adequate medical diagnosis common pathologies of cardiovascular system</li> </ul>	<ul style="list-style-type: none"> <li>Interpret the lab investigations for different common medical pathologies of cardiovascular system</li> <li>Develop a treatment plan for each of common medical-pathologies of cardiovascular system</li> <li>Provide basic nursing care for clients with different medical pathologies of cardiovascular system</li> </ul>	<ul style="list-style-type: none"> <li>Apply ethical principles while caring for clients</li> <li>Demonstrate a grooming appearance</li> </ul>	<p><b>Medical pathologies of Cardiovascular system (Hypotension, Hypertension and Stroke):</b></p> <ul style="list-style-type: none"> <li>Definition of each of the selected common pathologies of cardiovascular system</li> <li>Causes and pathophysiology overview</li> <li>Sign and symptoms of each pathology</li> <li>Lab Investigations: Full blood account, Urea creatinine and electrolytes Imageries: Electrocardiogram (ECG) for each pathology</li> </ul>	<ul style="list-style-type: none"> <li>In group work learners present anatomical structure of cardiovascular system and blood circulation.</li> <li>Group discussion using case studies to outline signs and symptoms, investigations, diagnosis and treatment of each of common medical pathologies of cardiovascular system,</li> </ul>

<ul style="list-style-type: none"> <li>• Explain the evolution and complications of each common medical pathology of cardiovascular system</li> </ul>			<ul style="list-style-type: none"> <li>• Adequate medical diagnosis for each pathology</li> <li>• Treatment plan for each pathology</li> <li>• Evolution and complications of each pathology</li> </ul>	<ul style="list-style-type: none"> <li>• Use of available protocols of non- communicable diseases in management of hypertension</li> <li>• In the skills lab, students practice on simulated patients</li> <li>• In real context (health posts, health centers and district hospitals), students practice what learned in theory</li> </ul>
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**Links to other subjects:** *Human body anatomy and physiology, Health assessment, Fundamental of Nursing, Pharmacology*

**Assessment criteria:** *Learner makes appropriate decision on case management*

**Materials:** *Protocols of non-communicable diseases management (hypertension) , written case studies on different pathologies, textbooks, videos, simulated patients, other sim lab equipment*

Topic Area: Management of Medical Pathologies		Sub -Topic: Medical pathologies of body systems		
MEDICAL PATHOLOGIES S5	Unit 3: Pathologies of Digestive System		Number of Periods:16	
<b>Key unit competence:</b> Take appropriate decision on different common medical pathologies of Digestive system				
Learning Objectives			Content	Learning Activities
Knowledge and understanding	Skills	Attitudes and values		
<ul style="list-style-type: none"> <li>List the common medical pathologies of digestive system</li> <li>Describe causes signs and symptoms of common medical pathologies of digestive system</li> <li>Enumerate the investigations requested for common medical pathologies of digestive system</li> <li>Identify the adequate medical diagnosis common pathologies of digestive system</li> </ul>	<ul style="list-style-type: none"> <li>Interpret the lab investigations for different common medical pathologies of digestive system</li> <li>Develop a treatment plan of each of common medical pathologies of digestive system</li> <li>Provide basic nursing care to clients with different selected common medical pathologies of digestive system</li> </ul>	<ul style="list-style-type: none"> <li>Respect the Autonomy and dignity of patients while caring</li> <li>Demonstrate accountability and responsibility</li> </ul>	<p><b>Common pathologies of digestive system:</b></p> <ul style="list-style-type: none"> <li>gastritis</li> <li>diarrhea and constipation</li> <li>causes and pathophysiology overview</li> <li>Signs and symptoms of each pathology</li> <li>Investigations: (Full blood account, abdominal ultrasound and abdominal x-ray</li> <li>Medical diagnosis</li> <li>Treatment plan to each of common pathology of digestive system</li> </ul>	<ul style="list-style-type: none"> <li>In group work learners present anatomical structure of digestive system.</li> <li>Group discussion using case studies to outline signs and symptoms, investigations, diagnosis and treatment of each of common medical pathologies of digestive system</li> </ul>

				<ul style="list-style-type: none"> <li>• By watching videos, practice the management of different medical pathologies of digestive system In the skills lab, students practice on simulated patients</li> <li>• In real context (health posts, health centers and district hospitals), students practice what learned in theory</li> </ul>
<ul style="list-style-type: none"> <li>• Explain the evolution and complications of each common pathology of digestive system</li> </ul>			– Evolution and complications of each of common pathology of digestive system	

**Links to other subjects:** Human body anatomy and physiology, Health assessment, Fundamental of Nursing, Pharmacology

**Assessment criteria:** Learner takes appropriate decision on case management

**Materials:** Algorithms of management of different pathologies, written case studies on different pathologies, text books, videos, simulated patient, other simulation lab equipment

<b>Topic Area: Management of Medical Pathologies</b>	<b>Sub -Topic: Medical pathologies of body systems</b>
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<b>MEDICALPATHOLOGIES S5</b>	<b>Unit 4: Pathologies of urogenital System</b>	<b>Number of Periods: 25</b>
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**Key unit competence:** Competency: Take appropriate decision on different common medical pathologies of urogenital system

<b>Learning Objectives</b>			<b>Content</b>	<b>Learning Activities</b>
<b>Knowledge and understanding</b>	<b>Skills</b>	<b>Attitudes and values</b>		
<ul style="list-style-type: none"> <li>List the common medical pathologies of urogenital system</li> <li>Describe causes, signs and symptoms of common medical pathologies of urogenital system</li> <li>Compare the different common pathologies of urogenital system</li> <li>Enumerate the investigations requested for common medical pathologies of urogenital system</li> </ul>	<ul style="list-style-type: none"> <li>Interpret the different lab investigations of common medical pathologies of urogenital system</li> <li>Develop a treatment plan of each of common medical-pathologies of urogenital system</li> </ul>	<ul style="list-style-type: none"> <li>Demonstrate a grooming appearance</li> <li>Demonstrate accountability and Responsibility</li> <li>Respect dignity and autonomy of clients</li> <li>Display honesty and empathy</li> </ul>	<p><b>Common pathologies of urogenital system:</b></p> <ul style="list-style-type: none"> <li>Definitions:</li> <li>Urinary tract infection (urethritis, cystitis, acute pyelonephritis and chronic pyelonephritis,) Prostatitis (acute and chronic) Sexual transmissible diseases</li> <li>– Causes and pathophysiology overview</li> <li>– Sign and symptoms of each pathology</li> </ul>	<ul style="list-style-type: none"> <li>In group work learners present anatomical structure of urogenital system of male and female.</li> <li>Group discussion using case studies to outline signs and symptoms, investigations, diagnosis and treatment of each of common medical pathologies of urogenital system,</li> <li>In skills lab, students practice on simulated patients</li> </ul>

<ul style="list-style-type: none"> <li>• Identify the adequate medical diagnosis common pathologies of urogenital system</li> <li>• Explain the evolution and complications of each common pathology of urogenital system</li> </ul>	<ul style="list-style-type: none"> <li>• Provide basic nursing care to clients with different selected common medical pathologies of urogenital system</li> </ul>	<ul style="list-style-type: none"> <li>• Team working spirit</li> <li>• Demonstrate good communication and collaboration skills</li> </ul>	<ul style="list-style-type: none"> <li>– Investigations: (Full blood account, Urine analysis) Medical diagnosis</li> <li>– Treatment plan to each of common pathology of urogenital system</li> <li>– Evolution and complications of each of common pathology of urogenital system.</li> </ul>	<ul style="list-style-type: none"> <li>• By watching videos, students learn the management of different common medical pathologies of urogenital system</li> <li>• In the real context (Health posts, health centers, district hospitals) students practice on the real patients what learned in theory</li> </ul>
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**Links to other subjects:** *Human body anatomy and physiology, Health assessment, Fundamental of Nursing, Pharmacology*

**Assessment criteria:** *Learner takes appropriate decision on case management*

**Materials:** *Algorithms of management of different pathologies, written case studies on different pathologies, text books, videos, simulated patient , other simulation lab equipment*

<b>Topic Area: Management of Medical Pathologies</b>			<b>Sub -Topic: Medical pathologies of body systems</b>	
<b>MEDICAL PATHOLOGIES S5</b>	<b>Unit 5: Pathologies of endocrine System</b>			<b>Number of Periods: 20</b>
<b>Key unit competence:</b> Take appropriate decision on different common medical pathologies of endocrine system				
<b>Learning Objectives</b>				
<b>Knowledge and understanding</b>	<b>Skills</b>	<b>Attitudes and values</b>	<b>Content</b>	<b>Learning Activities</b>
<ul style="list-style-type: none"> <li>List different types of diabetes</li> <li>Describe causes, signs and symptoms of different types of diabetes</li> <li>Describe the different types of diabetes</li> <li>Enumerate the investigations requested for diabetes</li> <li>– Explain the evolution and complications of diabetes</li> </ul>	<ul style="list-style-type: none"> <li>Interpret lab investigations for different types of diabetes</li> <li>Develop a treatment plan of each type of diabetes</li> <li>Provide basic nursing care to clients with different selected common medical pathologies of endocrine system</li> </ul>	<ul style="list-style-type: none"> <li>Demonstrate a grooming appearance</li> <li>Demonstrate accountability and Responsibility</li> <li>Respect dignity and autonomy of clients</li> <li>Display honesty and empathy</li> <li>Team working spirit</li> <li>Demonstrate good communication and collaboration skills</li> </ul>	<p><b>Common pathologies of endocrine system:</b></p> <ul style="list-style-type: none"> <li>Definitions: Diabetes mellitus ( type I, type II and gestational diabetes)</li> <li>Causes and pathophysiology overview of diabetes mellitus</li> <li>Signs and symptoms of each pathology</li> <li>Investigations: (glycaemia, urine glucose).</li> <li>Medical diagnosis</li> <li>Treatment plan to each of type of diabetes</li> <li>Evolution and complications of diabetes</li> </ul>	<ul style="list-style-type: none"> <li>In group work learners present anatomical structure of pancreas and the role of pancreas in endocrine system</li> <li>Group discussion using case studies to outline signs and symptoms, investigations, diagnosis and treatment of each of different types of diabetes</li> <li>Use of available protocols of non-communicable diseases in management of diabetes</li> <li>In skills lab, students practice on simulated patients</li> <li>By watching videos, students learn the management of different common medical pathologies of urogenital system</li> <li>In the real context (Health posts, health centers, district hospitals) students practice on the real patients what learned in theory</li> </ul>

**Links to other subjects:** *Human body anatomy and physiology, Health assessment, Fundamental of Nursing, Pharmacology*

**Assessment criteria:** *Learner takes appropriate decision on case management*

**Materials:** *Protocol of non-communicable diseases management (diabetes mellitus), written case studies on different pathologies, videos, simulated patient; other simulation lab equipment.*



<b>Topic Area: Management of Medical Pathologies</b>	<b>Sub -Topic: Medical pathologies of body systems</b>
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<b>MEDICAL PATHOLOGIES S5</b>	<b>Unit 6: Pathologies of Neurological System</b>	<b>Number of Periods: 18</b>
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**Key unit Competence:** Take appropriate decision on different common medical pathologies of neurological system

**Learning Objectives**

<b>Knowledge and understanding</b>	<b>Skills</b>	<b>Attitudes and values</b>	<b>Content</b>	<b>Learning Activities</b>
<ul style="list-style-type: none"> <li>List different common neurological pathologies</li> <li>Describe causes, signs and symptoms of common neurological pathologies</li> <li>Enumerate the investigations requested</li> <li>for common neurological pathologies</li> </ul>	<ul style="list-style-type: none"> <li>Interpret the lab investigations of common medical pathologies of Neurological system</li> <li>Make adequate medical diagnosis of different common</li> <li>neurological pathologies</li> </ul>	<ul style="list-style-type: none"> <li>Demonstrate a grooming appearance</li> <li>Demonstrate accountability and Responsibility</li> <li>Respect dignity and autonomy of clients</li> <li>Display honesty and empathy</li> <li>Team working spirit</li> <li>Demonstrate good communication and collaboration skills</li> </ul>	<p>Common pathologies of neurological system (Headache, Migraine, and Epilepsy):</p> <ul style="list-style-type: none"> <li>Definitions</li> <li>Causes and pathophysiology overview,</li> <li>Signs and symptoms of each pathology</li> <li>Investigations: Full blood account,Urea,creatinine and electrolytes</li> </ul> <p>Imageries (Fundoscopy, CT- scan, EEG).</p> <ul style="list-style-type: none"> <li>Medical diagnosis</li> </ul>	<ul style="list-style-type: none"> <li>In group work learners present anatomical structure nervous system</li> <li>Group discussion using case studies to outline signs and symptoms, investigations,</li> <li>diagnosis and treatment of each of common neurological pathologies</li> <li>In skills lab, students practice o simulated patients</li> </ul>

- Explain the evolution and complications of common neurological pathologies

- Develop a treatment plan of each of common neurological pathologies
- Provide basic nursing care to clients with different selected common medical pathologies of neurologic system

- Treatment plan to each of common neurological pathologies
- Evolution and complications of common pathologies of neurological system

- By watching videos, students learn the management of different common medical pathologies of neurological system
- In the real context (Health posts, health centers, district hospitals) students practice on the real patients what learned in theory

**Links to other subjects:** *Human body anatomy and physiology, Health assessment, Fundamental of Nursing, Pharmacology*

**Assessment criteria:** *Learner take appropriate decision on case management*

**Materials:** *Written case studies on common neurological pathologies, Glasgow coma scale, videos, simulated patient*

### 3.2.3. Medical Pathology for S6

#### 3.2.3.1. Key competences for S6

- Take appropriate decision on different common medical pathologies of eyes
- Takes appropriate decision on different common medical pathologies of ear
- Take appropriate decision on different common medical pathologies of nose
- Take appropriate decision on different common medical pathologies of mouth and oesophagus
- Take appropriate decision on different common medical pathologies of the skin

#### 3.2.4. Table Units for S6

Topic Area: Management of Medical Pathologies			Topic: Medical pathologies of sensory organs	
MEDICAL PATHOLOGIES S6	Unit 1: Eyes			Number of Periods: 12
<b>Key unit Competence:</b> Take appropriate decision on different common medical pathologies of eyes				
Learning Objectives			Content	Learning Activities
Knowledge and understanding	Skills	Attitudes and values		
<ul style="list-style-type: none"> <li>• List different common eyes pathologies</li> <li>• Describe causes, signs and symptoms of common eyes pathologies</li> </ul>	<ul style="list-style-type: none"> <li>• Make the adequate medical diagnosis of different common eyes pathologies</li> <li>• Develop a treatment plan of each of common eyes pathologies</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate accountability and Responsibility</li> <li>• Respect autonomy and dignity of clients</li> </ul>	<p><b>Common pathologies of eyes:</b></p> <ul style="list-style-type: none"> <li>• Definitions: Allergic reactions Blepharitis</li> <li>• Conjunctivitis (acute and Gonococci) Myopia and hypermetropia</li> </ul>	<ul style="list-style-type: none"> <li>• In group work learners present anatomical structure of eyes and their functions.</li> </ul>

- Explain the management plan of common eyes pathologies

- Provide basic nursing care to clients with different selected common eyes pathologies

- Age related changes: Cataract
- Causes and pathophysiology overview
- Signs and symptoms of each pathology
- Medical diagnosis
- Management plan of common eyes pathologies

- Group discussion using case studies to outline Causes, signs and symptoms, diagnosis and management plan of each of common eyes pathologies
- Learner use Snellen visual acuity chart to examine some eyes conditions
- In skills lab, students practice on simulated patients
- By watching videos, students learn the management of different common medical pathologies of eye
- In the real context (Health posts, health centers, district hospitals) students practice on the real patients what learned in theory

**Links to other subjects:** *Human body anatomy and physiology, Health assessment, Fundamental of Nursing, Pharmacology*

**Assessment criteria:** *Learner will be able to take appropriate decision on case management*

**Materials:** *Snellen visual acuity chart, written case studies on common eyes pathologies, textbooks, videos, simulated patient and other simulation lab equipment.*

<b>Topic Area: Management of Medical Pathologies</b>			<b>Sub -Topic: Medical pathologies of sensory organs</b>	
<b>MEDICAL PATHOLOGIES S6</b>	<b>Unit 2: Ear</b>			<b>Number of Periods: 6</b>
<b>Key unit Competence: Learner Take appropriate decision on different common medical pathologies of ear</b>				
<b>Learning Objectives</b>				
<b>Knowledge and understanding</b>	<b>Skills</b>	<b>Attitudes and values</b>	<b>Content</b>	<b>Learning Activities</b>
<ul style="list-style-type: none"> <li>List different common ear pathologies</li> <li>Describe causes, signs and symptoms of common ear pathologies</li> <li>Explain the management plan of common ear pathologies</li> </ul>	<ul style="list-style-type: none"> <li>Interpret lab investigations of common medical pathologies of the ear</li> <li>Make the adequate medical diagnosis of different common ear pathologies</li> <li>Develop a treatment plan of each of common ear pathologies</li> <li>Provide basic nursing care to clients with different selected common ear pathologies</li> </ul>	<ul style="list-style-type: none"> <li>Demonstrate accountability and Responsibility</li> <li>Respect autonomy and dignity of clients</li> <li>Demonstrate communication and collaboration skills</li> </ul>	<p><b>Common pathologies of ear:</b></p> <ul style="list-style-type: none"> <li>Definitions: Otitis media (acute and chronic) Cerumen plug</li> <li>Deafness Ear injuries Ear foreign body</li> <li>Causes and pathophysiology overview</li> <li>Signs and symptoms of each pathology</li> <li>Investigations: Hearing test</li> <li>Medical diagnosis</li> <li>Management plan of common ear pathologies</li> </ul>	<ul style="list-style-type: none"> <li>In group work learners present anatomical structure ear and its functions.</li> <li>Group discussion using case studies to outline signs and symptoms, diagnosis and management plan of each of common ear pathologies</li> <li>By watching videos, students learn the management of different common medical pathologies of ear</li> <li>In the real context (Health posts, health centers, district hospitals) students practice on the real patients what learned in theory</li> </ul>

**Links to other subjects:** Human body anatomy and physiology, Health assessment, Fundamental of Nursing, Pharmacology

**Assessment criteria:** takes appropriate decision on case management

**Materials:** Written case studies on common ear pathologies, text books, videos

<b>Topic Area: Management of Medical Pathologies</b>			<b>Sub -Topic: Medical pathologies of sensory organs</b>	
<b>Medical pathologies S6</b>		<b>Unit 3: Nose</b>		<b>Number of Periods: 6</b>
<b>Key unit Competence:</b> Take appropriate decision on different common medical pathologies of nose				
<b>Learning Objectives</b>				
<b>Knowledge and understanding</b>	<b>Skills</b>	<b>Attitudes and values</b>	<b>Content</b>	<b>Learning Activities</b>
<ul style="list-style-type: none"> <li>List different common nose pathologies</li> <li>Describe causes, signs and symptoms of common nose pathologies</li> <li>Explain the management plan of common nose pathologies</li> </ul>	<ul style="list-style-type: none"> <li>Interpret lab investigations of common medical pathologies of the nose</li> <li>Make the adequate medical diagnosis different common nose pathologies</li> <li>Develop a treatment plan for patients with different nose medial pathologies</li> </ul>	<ul style="list-style-type: none"> <li>Demonstrate communication and collaboration skills</li> <li>Demonstrate empathy</li> <li>Demonstrate accountability and responsibility</li> </ul>	<p><b>Common pathologies of nose:</b></p> <ul style="list-style-type: none"> <li>Definitions:</li> <li><b>Rhinitis</b></li> <li><b>Sinusitis (acute and chronic)</b></li> <li><b>Nose injuries</b></li> <li><b>Epistaxis/ nose bleeding</b></li> <li><b>Pharyngitis</b></li> <li><b>Vegetation/Nasal polyps</b></li> <li><b>Tonsillitis</b></li> <li><b>Laryngitis</b></li> <li>– Causes and pathophysiology overview</li> <li>– Sign and symptoms of each pathology</li> </ul>	<ul style="list-style-type: none"> <li>In group work learners present anatomical structure nose and its functions.</li> <li>Group discussion using case studies to outline signs and symptoms, diagnosis and management plan of each of common nose pathologies</li> </ul>

	<ul style="list-style-type: none"> <li>• Provide basic nursing care to clients with different selected common nose pathologies</li> </ul>		<ul style="list-style-type: none"> <li>– Investigations: Hearing test</li> <li>– Medical diagnosis</li> <li>– Management plan of common nose pathologies</li> </ul>	<ul style="list-style-type: none"> <li>• By watching videos, image observation students learn the management of different common medical pathologies of nose</li> <li>• In the real context (Health posts, health centers, district hospitals) students practice on the real patients what learned in theory</li> </ul>
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**Links to other subjects:** *Human body anatomy and physiology, Health assessment, Fundamental of Nursing, Pharmacology*

**Assessment criteria:** *Learner takes appropriate decision on case management*

**Materials:** *Written case studies on common nose pathologies, text books, Videos*

<b>Topic Area: Management of Medical Pathologies</b>			<b>Sub -Topic: Medical pathologies of Sensory organs</b>	
<b>Medical pathologies s6</b>	<b>Unit 4: Mouth and Oesophagus</b>			<b>Number of Periods:</b> <b>6</b>
<b>Key unit Competence:</b> Take appropriate decision on different common medical pathologies of the mouth and Oesophagus				
<b>Learning Objectives</b>				
<b>Knowledge and understanding</b>	<b>Skills</b>	<b>Attitudes and values</b>	<b>Content</b>	<b>Learning Activities</b>
<ul style="list-style-type: none"> <li>List different common oral and Esophageal pathologies</li> <li>Describe causes, signs and symptoms of common oral and Esophageal pathologies</li> <li>Explain the management plan of common oral and Oesophageal pathologies</li> </ul>	<ul style="list-style-type: none"> <li>Make the adequate medical diagnosis of different common oral and Oesophageal pathologies</li> <li>Interpret lab investigations of common medical pathologies of the Oesophagus</li> <li>Develop a treatment plan for common oral and Oesophageal common pathologies</li> <li>Provide basic nursing care to clients with different selected common Oesophageal pathologies</li> </ul>	<ul style="list-style-type: none"> <li>Demonstrate communication and collaboration skills</li> <li>Demonstrate empathy</li> <li>Demonstrate accountability and responsibility</li> </ul>	<p><b>Common pathologies of oral and esophagus:</b></p> <ul style="list-style-type: none"> <li>Definitions: <ul style="list-style-type: none"> <li>Dental carries/teeth</li> <li>Oral pharyngeal candida</li> <li>Injuries</li> <li>Oesophagitis</li> </ul> </li> <li>Causes and pathophysiology overview</li> <li>Sign and symptoms of each pathology</li> <li>Medical diagnosis</li> <li>Management plan of common oral and esophageal pathologies</li> </ul>	<ul style="list-style-type: none"> <li>In group work learners present anatomical structure oral and esophageal and its functions.</li> <li>Group discussion using case studies to outline signs and Symptoms, diagnosis and management plan of each of oral and esophageal pathologies</li> <li>By watching videos, students learn the management of different common medical pathologies of oesophagus</li> <li>In the real context (Health posts, health centers, district hospitals) students practice on the real patients what learned in theory</li> </ul>



**Links to other subjects:** Human body anatomy and physiology, Health assessment, Fundamental of Nursing, Pharmacology

**Assessment criteria:** Learner takes appropriate decision on case management

**Materials:** Written case studies on common oral and esophageal pathologies, text books, videos

<b>Topic Area: Management of Medical Pathologies</b>			<b>Sub -Topic: Medical pathologies of sensory organs</b>	
<b>Medical pathologies s6</b>	<b>Unit 5: Skin</b>		<b>Number of Periods: 6</b>	
<b>Key unit Competence:</b> Take appropriate decision on different common medical pathologies of the skin				
<b>Learning Objectives</b>				
<b>Knowledge and understanding</b>	<b>Skills</b>	<b>Attitudes and values</b>	<b>Content</b>	<b>Learning Activities</b>
<ul style="list-style-type: none"> <li>List different common skin pathologies</li> <li>Describe causes, signs and symptoms of common skin pathologies</li> <li>Explain the management plan of common skin pathologies</li> </ul>	<ul style="list-style-type: none"> <li>Make the adequate medical diagnosis of different common skin pathologies</li> <li>Interpret the lab investigations of common medical pathologies of skin</li> <li>Develop a treatment plan for common skin pathologies</li> </ul>	<ul style="list-style-type: none"> <li>Apply ethical principles while caring for clients</li> <li>Appreciate the management plan of common skin pathologies</li> </ul>	<ul style="list-style-type: none"> <li><b>Common pathologies of the skin:</b> <ul style="list-style-type: none"> <li>Definitions Infant diaper / nappy</li> <li>Rash/erythema</li> <li>Albinism</li> <li>Vitiligo</li> <li>Psoriasis</li> <li>Eczema</li> <li>Furuncle</li> <li>Acne</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>In group work learners present anatomical structure skin and its functions.</li> <li>Group discussion using case studies to outline signs and symptoms, diagnosis and management plan of each skin pathologies</li> <li>By watching videos, images observation, students learn the management of different common medical pathologies of skin</li> </ul>

	<ul style="list-style-type: none"> <li>• Provide basic nursing care to clients with different selected common pathologies of skin</li> </ul>		<ul style="list-style-type: none"> <li>- Causes and pathophysiology overview</li> <li>- -Sign and symptoms of each pathology</li> <li>- Medical diagnosis</li> <li>• Management plan of common skin pathologies.</li> </ul>	<ul style="list-style-type: none"> <li>• In the real context (Health posts, health centers, district hospitals) students practice on the real patients what learned in theory</li> </ul>
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**Links to other subjects:** *Human body anatomy and physiology, Health assessment, Fundamental of Nursing, Pharmacology*

**Assessment criteria:** *Learner takes appropriate decision on case management*

**Materials:** *Written case studies on common skin pathologies ,text books, videos; and images*

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# APPENDICES

## Appendix A: Weekly Time Allocation

No	Subjects	Weight	WEEKLY TIME ALLOCATION		
			S4	S5	S6
1	Fundamentals of Nursing *	11	7	7	7
2	Biology*	11	7	7	7
3	Chemistry*	11	7	7	7
4	Mathematics*	5	3	3	3
5	Physics*	10	6	6	6
6	Ethics and professional code of conduct	1	1	1	0
7	Medical Pathology *	2	0	3	1
8	Surgical Pathology *	1	0	1	1
9	Pharmacology *	4	3	2	2
10	Maternal and Child health *	7	4	4	4
11	Individual learning	5	3	1	5
12	Clinical attachment*	13	6	7	10
13	Kinyarwanda	3	2	2	0
14	English*	6	4	4	4
15	French	2	1	1	1
16	Entrepreneurship	2	2	1	0
17	Citizenship	2	2	1	0

18	ICT	2	1	1	1
19	Sports/ Clubs	2	1	1	1
Total periods / week		<b>100</b>	<b>60</b>	<b>60</b>	<b>60</b>
Total number of contact/years			<b>2340</b>	<b>2340</b>	<b>2340</b>
Total number of contact hours/year (39 weeks)			<b>1560</b>	<b>1560</b>	<b>1560</b>

## Appendix B: Medical Pathology Overview for Associate Nurse

Topic	Sub-topics	Key competencies		
		S4	S5	S6
Medical pathologies	Pathology of body systems	-	Take appropriate decision on different common medical pathologies of respiratory system	
		-	Take appropriate decision on different common medical pathologies of cardiovascular system	
		-	Take appropriate decision on different common medical pathologies of Digestive system	
		-	Take appropriate decision on different common medical pathologies of urogenital system	
		-	Take appropriate decision on different common medical pathologies of endocrine system	
		-	Take appropriate decision on different common medical pathologies of neurological system	

	Pathologies of Sensory organs	-		Take appropriate decision on different common medical pathologies of eyes
		-		Take appropriate decision on different common medical pathologies of ear
		-		Take appropriate decision on different common medical pathologies of Nose
		-		Take appropriate decision on different common medical pathologies of mouth& esophagus
		-		Take appropriate decision on different common medical pathologies of Skin