

SURGICAL PATHOLOGY SYLLABUS

FOR ASSOCIATE NURSING PROGRAM

SENIOR 5 & 6

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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.

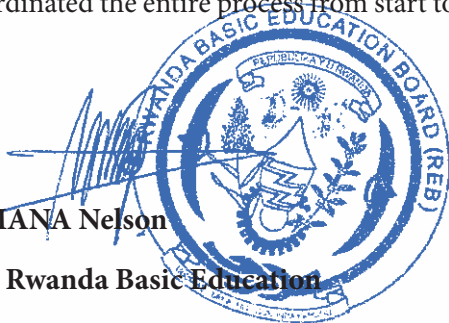
Surgical Pathology is one of subjects of Associate Nursing Program that emphasizes on equipping the learners with required knowledge, skills, and attitudes and values required for high-quality nursing care. This aligns with Rwanda Vision 2050, which focuses on improving the country's socio-economic status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

It is only the healthy people who can significantly play a major role in this socio-economic transformation journey. Surgical Pathology subject equips the students to manage the surgical pathology, diagnostic, complications of diseases.

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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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 health care 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 27th, 2004 phased out the A2 nursing program. A transition period was decided upon 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, the Associate Nursing Program as provided by the Article 58 of the Rwandan Law Determining Organisation 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.

1.2. 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 values of responsibility, accountability and patriotism in serving Nation. ;
8. Ensure the privacy, 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 SURGICAL PATHOLOGY

2.1. Rationale of Teaching and Learning surgical pathology

Surgical pathology subject is one of professional subjects specific to Associate Nursing Program. The surgical pathology is a competence-based like other subjects of Associate Nursing program.

Surgical pathology subject equips the learner with knowledge, skills, and attitudes for the management of patients with surgical conditions affecting human body. Surgical pathologies are among the most frequent health conditions that are observed in daily clinical consultations at all levels of health care system. The subject equips the associate nurse with critical thinking skills that are needed to assess common patient's surgical conditions and take appropriate decision to resolve client problems. 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. The associatenurse resolves minor surgical problems and refers the major ones as needed without delay.

2.1.1. Surgical pathology and society

Teaching and learning Surgical 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.

Surgical Pathology is an important component of basic nursing care delivery. This is due to the fact that surgical conditions are among the most frequent health conditions in daily consultations in different levels of health care system. Surgical Pathology subject empowers the associate nurse with critical thinking skills that are needed to identify patient health problems and take appropriate decision to resolve client problems.

In Rwanda, the associate nurse is on frontline in 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 with minor health conditions are resolved by the associate nurse.

The inclusion of Surgical Pathology subject in upper-secondary basic education for Associate Nursing Program is justified by the fact that, not only it aims to resolve surgical patient 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. Surgical Pathology and learners

Learners have to be prepared from an early age for active and accountable health care provider with the highest sense of quality. With this regard, the surgical 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 Surgical 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 in surgical pathology conditions.

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 class room 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 to 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 surgical Pathology competences

The overall objective of learning surgical Pathology at upper-secondary basic education level is to equip learners with appropriate surgical 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 local surgical pathologies;
2. Take appropriate decision on different locomotor traumatism;
3. Take appropriate decision on different digestive conditions;
4. Take appropriate decisions on different urogenital conditions.

2.2.3. Surgical Pathology and developing competencies

The national policy documents based on national aspirations identify some ‘basic Competencies’ alongside the ‘Generic Competencies’ that will develop higher order critical thinking skills and help students learn Surgical 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 studies, exposure of nursing students to laboratory skills and perform 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 Surgical Pathology, which in turn will promote interpersonal relations and teamwork. The manipulation of apparatus and data during class presentations and undertaking of simulated basic nursing care practice by learners will involve analytical and problem-solving skills directed towards Surgical Pathology, identifying patient health needs, plan, implement, and evaluate required intervention.

The acquired knowledge and skills in surgical 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 learning, 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 whether learning takes place properly.

The teaching and learning will adopt the constructivist and behaviorist approaches, which are useful in nursing practice for the delivery of healthcare. This will encourage associate nursing students to learn new information and to change their attitudes for better basic nursing care provision. These approaches reinforce the inquiry-based instruction and experiential learning will be at the heart of the implementation of this current syllabus.

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 nursing care improvement in particular. Simply, the emphasis is the need for learner to think about surgical Pathology activities in order to make sense of and understand the concepts related to basic nursing care practice. Traditionally, nursing science instruction has relied heavily on teacher-lead, direct instructional strategies with learners being the recipients of knowledge. In the syllabus, learners are in the driver's seat which implies they will construct their knowledge by posing question, planning investigations, conducting their own experiments, analyzing and communicating results. Moreover, the learning by doing will trigger the surgical 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 doing so, the learners will take ownership of the learning process and apply the acquired skills in a real patient care environment.

As for learners, their 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 make clinical decisions.

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 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 student s 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 the 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 the 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, and National examinations.

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 competencies based 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 competencies 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 competencies.

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 be recorded and stored in a portfolio because they will contribute for 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;
- 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 competencies as stated in the syllabus.

2.4.4. Structure and format of the examination

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

Component Weighting

COMPONENT	WEIGHTING
Paper: 1. Questions which measures knowledge and understanding (lower order thinking level) – Structured short answer questions.	Structured short answer questions will have 40% of the final marking of the assessment
2. Questions which measures skills and advanced level of understanding (higher order thinking level) Unstructured answer questions or extended essay questions and practical examination.	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 resource is 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, textbooks, Video CDs 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 pedagogical content knowledge (PCK) and teaching experience. Furthermore, a surgical 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 Surgical 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 manage adequately the classroom;
- Good communicator, Guide and counsellor;
- Passion for learners' teaching and learning.

3. SYLLABUS UNITS' DEVELOPMENT

3.1. Presentation of the structure of the syllabus units

Surgical 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 Unit Key Competence is broken into three types of Learning Objectives as follows:
 - a) **Type I:** Learning Objectives relating to Knowledge and Understanding (**Type I** Learning Objectives are also known as Lower Order Thinking Skills or LOTS);
 - b) **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).
4. Each Unit has a Content which indicates the scope of coverage of what a teacher should teach and learner should line in line with stated learning objectives;
5. 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);
6. 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 surgical Pathology for Associate Nursing program has got 4 Topic Areas (Surgical Pathology of local surgical pathologies, Surgical Pathology of locomotor traumatism, Surgical Pathology of digestive system pathologies, and Surgical Pathology of urinary system pathologies). As for units, they are 5 in S5, and 8 in S6.

3.2. Surgical pathologies for S5

3.2.1. Key competences for S5

- Take appropriate decision on abscess and phlegmon conditions
- Take appropriate decision on skin ulcers and stomies conditions
- Take appropriate decision on contusion, sprain and strain conditions
- Take appropriate decision on dislocation and fracture
- Take appropriate decision on Burn

3.3.2. Table units for S5

Topic Area: Surgical Pathologies			sub topic: Local Surgical pathologies	
Surgical pathologies S5		Unit 1:Abscess and phlegmon		Number of Periods: 6
Key unit Competence: Take appropriate decision on abscess and phlegmon conditions				
Learning Objectives				
Knowledge and understanding	Skills	Attitudes and values	Content	Learning Activities
<ul style="list-style-type: none"> - Describe causes, signs and symptoms of abscess and phlegmon conditions - Explain the evolution and complications of abscess and phlegmon conditions 	<ul style="list-style-type: none"> - Make the adequate diagnosis of abscess and phlegmon conditions - Develop a treatment plan of abscess and phlegmon - Implement the treatment plan for Abscess and Phlegmon 	<ul style="list-style-type: none"> - Demonstrate a grooming appearance - Be responsible and accountable of your actions - Respect dignity and autonomy of the clients - Demonstrate communication and collaboration skills 	<p>Abscess and Phlegmon diseases</p> <ul style="list-style-type: none"> - Definitions of abcess and phlegmon overview on pathophysiology - Description of causes, signs and symptoms of abscess andphlegmon; - Adequate diagnosis abscess and phlegmon; - Treatment plan to abscessand phlegmon - Evolution and complications abscess andphlegmon 	<ul style="list-style-type: none"> - By watching videos observing images learners discuss in Group signs and symptoms , diagnosis diagnosis and treatment of abscess and phlegmon - In a simulation lab, learners practice the management of abscess and phlegmon on identified material , carry out research on management of abcess and phlegmon - In the real context (Health posts, Health Centers, district hospitals), students practice the management of abscess and phlegmon on real patients
Links to other subjects: Human anatomy and physiology, Fundamentals of Nursing, Pharmacology				
Assessment criteria: Learner takes appropriate decision on case management of abscess and phlegmon				
Materials: chart on skin lesions, videos on skin conditions, computer, projector, speakers, and text books				

Topic Area: Management of Surgical Pathologies			sub topic: Local surgical pathologies	
Surgical pathologies S5		Unit 2: Skin ulcers and stomies		Number of Periods: 12
Key unit Competence: Take appropriate decision on skin ulcers and stomies conditions				
Learning Objectives				
Knowledge and understanding	Skills	Attitudes and values	Content	Learning Activities
<ul style="list-style-type: none"> - List different types of skin ulcers and stomies - Describe the causes ,signs of skin ulcers and stomies - Compare the different types of skin ulcers and stomies - Explain the evolution and complications of ulcers and stomies. 	<ul style="list-style-type: none"> - Make the adequate diagnosis of ulcers and stomies conditions - Develop a treatment plan of each of ulcers and stomies - Implement the treatment plan of ulcers and stomies. 	<ul style="list-style-type: none"> - Demonstrate a grooming appearance - Be responsible and accountable of your actions - Respect dignity and autonomy of the clients - Demonstrate communication and collaboration skills. 	<p>Skin ulcers, and stomies diseases</p> <ul style="list-style-type: none"> - Definition of skin ulcers, and stomies; - Causes and overview on pathophysiology of skin ulcers and stomies - Description of types of skin ulcers and stomies; - Adequate surgical diagnosis of skin ulcers; - Treatment plan of skin ulcers and stomies; - Evolution and complications of skin ulcers and stomies. 	<ul style="list-style-type: none"> - By watching videos , learners in Group discuss the types, diagnosis and treatment of each of types of skin ulcers and stomies - In a simulation lab, learners practice the management of ulcers and stomies on mannequins - In the real context (Health posts, Health Centers, district hospitals), students practice the management of ulcers and stomies on real patients
Links to other subjects: Human anatomy and physiology, Fundamental of Nursing, Pharmacology				
Assessment criteria: Learner takes appropriate decision on case management of skin ulcers and stomies				
Materials: chart on skin lesions, videos on skin conditions, computer, projector, speakers, and text books, mannequins.				

Topic Area: Management of Surgical Pathologies			sub topic: Surgical pathologies of locomotor traumatism	
Surgical pathologies S5		Unit 3: Contusion, Sprain and Strain		Number of Periods: 2
Key unit Competence: Take appropriate decision on Contusion, Sprain and Strain conditions				
Learning Objectives				
Knowledge and understanding	Skills	Attitudes and values	Content	Learning Activities
<ul style="list-style-type: none"> - Define contusion and sprain - Describe causes, signs and symptoms of contusion, sprain - Compare Contusions and sprains - Explain the evolution and complications of contusion and sprain 	<ul style="list-style-type: none"> - Make the adequate surgical diagnosis of contusion and sprain - Develop a treatment plan of contusion and sprain - Implement the treatment plan of contusion and sprain 	<ul style="list-style-type: none"> - Demonstrate a grooming appearance - Be responsible and accountable of your actions - Respect dignity and autonomy of the clients - Demonstrate communication and collaboration skills 	<p>Contusions</p> <ul style="list-style-type: none"> - Definition of concepts of Contusions, Sprains and Strains - Causes and overview on pathophysiology of contusion, sprain and strain. - Description of signs and symptoms of contusion, sprain and strain. - Adequate surgical diagnosis of contusion, sprain and strain. - Treatment plan of contusion, sprain and strain. - Evolution and complications of contusion, sprain and strain. 	<ul style="list-style-type: none"> - By watching videos, learners in group discuss the signs and symptoms, diagnosis and treatment of contusion and sprain - In a simulation lab, learners practice the management of contusion/sprain on simulated patient - In the real context (Health posts, Health Centers, district hospitals), students practice the management of contusion/sprain on real patients
Links to other subjects: Human anatomy and physiology, Fundamental of Nursing, and Pharmacology				
Assessment criteria: Learner will be able to take appropriate decision on case management of contusion, sprain and strain				
Materials: videos on contusion, sprain, computer, projector, speakers; text books; simulated patient				

Topic Area: Management of Surgical Pathologies		Sub topic: Surgical pathologies of locomotors traumatisms		
Surgical pathologies S5		Unit 4: Dislocation and Fracture		Number of Periods: 8
Key unit Competence: Take appropriate decision on Dislocation and fracture				
Learning Objectives				
Knowledge and understanding	Skills	Attitudes and values	Content	Learning Activities
<ul style="list-style-type: none"> - List the common locomotor traumatisms - Differentiate dislocation to the fracture - Describe signs and symptoms of dislocation and fracture - Explain the evolution and complications of dislocation and fracture 	<ul style="list-style-type: none"> - Make the adequate surgical diagnosis of dislocation and fracture - Develop a treatment plan of dislocation and fracture - Implement a treatment plan of dislocation and fracture 	<ul style="list-style-type: none"> - Demonstrate a grooming appearance - Be responsible and accountable of your actions - Respect dignity and autonomy of the clients - Demonstrate communication and collaborations skills 	<ul style="list-style-type: none"> - Definition of concepts of dislocation and fracture, - Description of signs and symptoms of dislocation and fracture. - Adequate surgical diagnosis of dislocation and fracture - Treatment plan of dislocation and fracture - Evolution and complications of dislocation and fracture 	<ul style="list-style-type: none"> - By watching videos, Learners in group discuss the signs and symptoms, diagnosis and treatment of dislocation and fracture - In a simulation lab, learners practice the management of dislocation and fracture on simulated patient - In the real context (Health posts, Health Centers, district hospitals), students practice the management of dislocation and fracture on real patients
Links to other subjects: Human anatomy and physiology, - Fundamental of Nursing, Pharmacology				
Assessment criteria: Learner will be able to take appropriate decision on case management on dislocation and fracture				
Materials: chart on dislocation and fracture, videos on dislocation and fracture, computer, projector, speakers; text books and				

Topic Area: Management of Surgical Pathologies			Sub topic: Surgical pathologies of locomotor traumatism	
Surgical pathologies S5		Unit 5: Burn		Number of Periods: 8
Key unit Competence: Take appropriate decision on Burn				
Learning Objectives			Content	Learning Activities
Knowledge and understanding	Skills	Attitudes and values		
<ul style="list-style-type: none"> - Define Burn - List different causes of burn - Describe signs and symptoms of burns - Description of different degree of burn - Explain the evolution and complications of Burn 	<ul style="list-style-type: none"> - Make correct diagnosis of different degree of burns - Develop a treatment plan of burn - Provide basic nursing care for simple burns 	<ul style="list-style-type: none"> - Demonstrate a grooming appearance - Be responsible and accountable of your actions - Respect dignity and autonomy of the clients - Demonstrate communication and collaboration skills 	<p>Burn</p> <ul style="list-style-type: none"> - Definition of concept of Burn, - Describe degree of burn - Calculation of surface area of burn - Treatment plan of Burn - Evolution and complications of burn 	<ul style="list-style-type: none"> - By watching videos, Learners in group discuss the signs and symptoms, diagnosis and treatment of burn - By Group discussion; using chart and formula calculate percentage of burn surface area - In a simulation lab, learners practice the management of burn on an identified material In the real context (Health posts, Health Centers, district hospitals), students practice the management of burn on real patients
Links to other subjects: Human anatomy and physiology, Fundamental of Nursing, and Pharmacology				
Assessment criteria: Learner will be able to take appropriate decision on case management of burns				
Materials: chart on burn and formula of surface area calculation, videos on burn, computer, projector, speakers; text books.				

3.3.Surgical pathology for S6

3.3.1.Key competences for S6

- Take appropriate decision on gastro duodenal ulcer
- Take appropriate decision on appendicitis case management.
- Take appropriate decision on patient with Intestinal obstruction
- Take appropriate decision on patient with hernia
- Take appropriate decision on patient with hemorrhoid
- Take appropriate decision on patient with Balanitis and Balanoposthitis
- Take appropriate decision on patient with Phymosis and Paraphymosis
- Take appropriate decision on patient with Hydrocele and Testicular torsion

3.3.2. Table Units for S6

Topic Area: Management of Surgical Pathologies			Subtopic: Surgical pathologies of digestive system	
Surgical pathologies S6		Unit 1: Gastro Duodenal Ulcer		Number of Periods: 4
Key unit Competence: Take appropriate decision on gastro duodenal ulcer				
Learning Objectives			Content	Learning Activities
Knowledge and understanding	Skills	Attitudes and values		
<ul style="list-style-type: none"> - Define gastro duodenal ulcers - Describe causes, signs and symptoms of gastro duodenal ulcers - Explain the evolution and complications of gastro duodenal ulcers 	<ul style="list-style-type: none"> - Make the adequate diagnosis of gastro duodenal ulcers - Develop a treatment plan of gastro duodenal ulcers 	<ul style="list-style-type: none"> - Appreciate the management plan of gastro duodenal ulcers - Demonstrate a grooming appearance - Be responsible and accountable of your actions Respect dignity and autonomy of the clients 	<p>Gastro duodenal ulcers</p> <ul style="list-style-type: none"> - Definition of gastro duodenal ulcers - Causes and overview on Pathophysiology of Gastro duodenal ulcer - Description of signs and symptoms of gastro duodenal ulcers - Adequate surgical diagnosis of gastro duodenal ulcer - Treatment plan to gastro duodenal ulcers 	<ul style="list-style-type: none"> - By Group discussion learners discuss the signs and symptoms of gastro duodenal and ulcers - using written case studies, learners present the ability to outline signs and symptoms, diagnosis and treatment of gastro duodenal ulcers - In a simulation lab, learners practice the management of gastro and duodenal ulcers on mannequins

	– Implement the treatment plan of gastro duodenal ulcers	– Demonstrate communication and collaboration skills	– Evolution and complications of each of gastro duodenal ulcers.	– In the real context(Health posts, Health Centers, district hospitals), students practice the management of gastro and duodenal ulcers on real patients
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Links to other subjects: Human body anatomy and physiology, Fundamental of Nursing, and Pharmacology

Assessment criteria: Learner will be able to take appropriate decision on case management of gastro and duodenal ulcers

Materials: chart of gastro duodenal ulcer, written case studies on gastro duodenal ulcer; and text books, mannequins

Topic Area: Management of Surgical Pathologies			Subtopic: Surgical pathologies of digestive systems	
Surgical pathologies S6		Unit 2: Appendicitis.		Number of Periods: 5
Key unit Competence-: Take appropriate decision on appendicitis				
Learning Objectives			Content	Learning Activities
Knowledge and understanding	Skills	Attitudes and Values		
<ul style="list-style-type: none"> - Define appendicitis - Describe causes , signs and symptoms of appendicitis - Explain the evolutionand complications of appendicitis 	<ul style="list-style-type: none"> - Make the adequate diagnosis of appendicitis - Make a treatment plan of appendicitis 	<ul style="list-style-type: none"> - Demonstrate a grooming appearance - Be responsible and accountable of your actions Respect dignity and autonomy ofthe clients - Demonstrate communication and collaboration skills 	<p>Appendicitis</p> <ul style="list-style-type: none"> - Definition of appendicitis - Causes and overview of pathophysiology of appendicitis - Description of signs and symptoms of appendicitis - Adequate surgical diagnosis; - Treatment plan to appendicitis Evolution and complications of appendicitis. 	<ul style="list-style-type: none"> - By watching video and Group discussion usingwritten case studies, learners outline signs andsymptoms, , diagnosis and treatment of appendicitis - In a simulation lab, learners practice the management of appendicitis on simulated patient - In the real context (Health posts, Health Centers, district hospitals), students practice the management ofappendicitis on real patients
Links to other subjects: Human body anatomy and physiology, Fundamental of Nursing, Pharmacology				
Assessment criteria: Learner take appropriate decision on case management of appendicitis				
Materials: Chart on appendicitis, written case studies on appendicitis; text books and-simulated patient				

Topic Area: Management of Surgical Pathologies			Subtopic: Surgical pathologies of digestive system	
Surgical pathologies S6		Unit 3: Intestinal Obstruction		Number of Periods: 5
Key unit Competency: Take appropriate decision on intestinal obstruction				
Learning Objectives				
Knowledge and understanding	Skills	Attitudes and values	Content	Learning Activities
<ul style="list-style-type: none"> - Define Intestinal obstruction - Describe causes , signs and symptoms Intestinal obstruction - Explain the evolution and complications of Intestinal obstruction 	<ul style="list-style-type: none"> - Make the adequate diagnosis of Intestinal obstruction - Develop a treatment plan of Intestinal obstruction - Implement a treatment plan of intestinal obstruction 	<ul style="list-style-type: none"> - Demonstrate a grooming appearance - Be responsible and accountable of your actions Respect dignity and autonomy of the clients - Demonstrate communication and collaboration skills 	<ul style="list-style-type: none"> - Definition of Intestinal obstruction - Causes and overview on pathophysiology of intestinal obstruction - Description of signs and symptoms of Intestinal obstruction - Adequate surgical diagnosis of intestinal obstruction ; - Treatment plan of Intestinal obstruction - Evolution and complications of Intestinal obstruction. 	<ul style="list-style-type: none"> - By watching video ,Group discussion using writtencase studies, Learners outline signs and symptoms, , diagnosis and treatment of Intestinal obstruction - In the real context (Health posts, Health Centers, district hospitals), students practice the management of intestinal obstruction on real patients
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 on intestinal obstruction				

Materials: written case studies on intestinal obstruction; text books, and mannequins

Topic Area: Management of Surgical Pathologies		Subtopic: Surgical pathologies of digestive system
Surgical pathologies S6	Unit 4: Hernia.	Number of Periods: 4

Key unit Competency: Learner will be able to take appropriate decision on hernia

Learning Objectives			Content	Learning Activities
Knowledge and understanding	Skills	Attitudes and values		
<ul style="list-style-type: none"> - Define Hernia - List different types of hernia - Describe causes, signs and symptoms hernia - Explain the evolution and complications of hernia 	<ul style="list-style-type: none"> - Make the adequate diagnosis hernia - Develop a treatment plan of hernia - Implement the treatment plan of hernia 	<ul style="list-style-type: none"> - Demonstrate a grooming appearance - Be responsible and accountable of your actions Respect dignity and autonomy of the clients - Demonstrate communication and collaboration skills 	<p>Hernia</p> <ul style="list-style-type: none"> - Definition of hernia - Causes and pathophysiology of hernia - Description of signs and symptoms of hernia - Adequate surgical diagnosis of hernia; - Treatment plan of hernia - Evolution and complications of hernia. 	<ul style="list-style-type: none"> - By Group discussion using written case studies, learners outline signs and symptoms, diagnosis and treatment of hernia - In the real context (Health posts, Health Centers, district hospitals), students practice the management of hernia on real patients

Links to other subjects: Links to other subjects: Human body anatomy and physiology, - Fundamental of Nursing, Pharmacology

Assessment criteria: Learner takes appropriate decision on case management of hernia

Materials: written case studies on Hernia; text books and simulated patient

Topic Area: Management of Surgical Pathologies			Subtopic: Surgical pathologies of digestive system	
Surgical pathologies S6		Unit 5: Hemorrhoids		Number of Periods: 4
Key unit Competence: Take appropriate decision on Hemorrhoids				
Learning Objectives			Content	Learning Activities
Knowledge and understanding	Skills	Attitudes and values		
<ul style="list-style-type: none"> - Define Hemorrhoid - List different types of Hemorrhoid - Describe causes, signs and symptoms Hemorrhoid - Explain the evolution and complications of Hemorrhoid 	<ul style="list-style-type: none"> - Identify the adequate diagnosis Hemorrhoid - Manage a treatment plan of Hemorrhoid 	<ul style="list-style-type: none"> - Demonstrate a grooming appearance - Be responsible and accountable of your actions - Respect dignity and autonomy of the clients - Demonstrate communication and collaboration skills 	<p>Hemorrhoids</p> <ul style="list-style-type: none"> - Definition of hernia - causes pathophysiology of Hemorrhoids - Description of sign and symptoms of Hemorrhoid - Adequate surgical diagnosis; - Treatment plan to Hemorrhoid - Evolution and complications of Hemorrhoid 	<ul style="list-style-type: none"> - By watching video Group discussion using written case studies, learners outline signs and symptoms, diagnosis and treatment of Hemorrhoid - In the real context (Health posts, Health Centers, district hospitals), students practice the management of hemorrhoids on real patients
Links to other subjects: Human body anatomy and physiology, Health assessment, and Pharmacology				
Assessment criteria: Learner takes appropriate decision on case management of hemorrhoids				
Materials: Charts of haemorrhoids, written case studies on Hemorrhoid				

Topic Area: Management of Surgical Pathologies			Sub topic: Surgical pathologies of urogenital system	
Surgical pathologies S6		Unit 6: Balanitis and Balanoposthitis		Number of Periods: 4
Key unit Competence: Take appropriate decision on Balanitis and Balanoposthitis				
Learning Objectives				
Knowledge and understanding	Skills	Attitudes and values	Content	Learning Activities
<ul style="list-style-type: none"> - Define Balanitis and Balanoposthitis - Differentiate Balanitis and Balanoposthitis - Describe signs and symptoms Balanitis and Balanoposthitis - Explain the evolution and complications of Balanitis and Balanoposthitis 	<ul style="list-style-type: none"> - Make the adequate diagnosis of Balanitis and Balanoposthitis - Develop a treatment plan of Balanitis and Balanoposthitis 	<ul style="list-style-type: none"> - Demonstrate a grooming appearance - Beresponsible and accountable of your actions - Respect dignity and autonomy of the clients - Demonstrate communication and collaboration skills 	<p>Balanitis and Balanoposthitis:</p> <ul style="list-style-type: none"> - Definition of Balanitis and Balanoposthitis - Description of signs and symptoms of Balanitis and Balanoposthitis - Adequate surgical diagnosis of Balanitis and Balanoposthitis; - Treatment plan to Balanitis and Balanoposthitis - Evolution and complications of Balanitis and Balanoposthitis 	<ul style="list-style-type: none"> - By watching video, Group discussion using written case studies, learners outline signs and symptoms, diagnosis and treatment of Balanitis and Balanoposthitis - In a simulation lab, learners practice the management of Balanitis and Balanoposthitis on mannequins - In the real context (Health posts, Health Centers, district hospitals), students practice the management of Balanitis and Balanoposthitis on real patients
Links to other subjects: Human anatomy and physiology, Health assessment, Fundamental of Nursing, Pharmacology				
Assessment criteria: Learner will be able to take appropriate decision on case management on Balanitis and Balanoposthitis				
Materials: written case studies on Balanitis and Balanoposthitis; text books, mannequins				

Topic Area: Management of Surgical Pathologies			Sub topic: Surgical pathologies of urogenital system	
Surgical pathologies S6		Unit 7: Phymosis and Paraphymosis		Number of Periods: 4
Key unit Competence: Take appropriate decision on Phymosis and Paraphymosis				
Learning Objectives				
Knowledge and understanding	Skills	Attitudes and Values	Content	Learning Activities
<ul style="list-style-type: none"> - Define Phymosis and Paraphymosis - Differentiate Phymosis and Paraphymosis - Describe causes, signs and symptoms Phymosis and Paraphymosis - Explain the evolution and complications of Phymosis and Paraphymosis 	<ul style="list-style-type: none"> - Make the adequate diagnosis of Phymosis and Paraphymosis - Develop a treatment plan of Phymosis and Paraphymosis - Implement the treatment plan of Phymosis and Paraphymosis 	<ul style="list-style-type: none"> - Demonstrate a grooming appearance - Be responsible and accountable of your actions - Respect dignity and autonomy of the clients - Demonstrate communication and collaboration skills 	<ul style="list-style-type: none"> - Definition of Phymosis and Paraphymosis - Description of signs and symptoms of Phymosis and Paraphymosis - Adequate surgical diagnosis; - Treatment plan to Phymosis and Paraphymosis - Evolution and complications of Phymosis and Paraphymosis 	<ul style="list-style-type: none"> - By watching video ,Group discussion using written case studies, learners y to outline signs and symptoms, diagnosis and treatment of of Phymosis and Paraphymosis - In a simulation lab, learners practice the management of Phymosis and Paraphymosis on mannequin. - In the real context (Health posts, Health Centers, district hospitals), students practice the management of Phymosis and Paraphymosis on real patients
Links to other subjects: Human anatomy and physiology, Fundamental of Nursing, Pharmacology				
Assessment criteria: Learner will be able to take appropriate decision on case management on Phymosis and Paraphymosis				
Materials: Chart on Phymosis and Paraphymosis, written case studies on Phymosis and Paraphymosis				

Topic Area: Management of Surgical Pathologies			Sub topic: Surgical pathologies of urogenital system	
Surgical pathologies S6		Unit 8: Hydrocele and Testicular torsion		Number of Periods: 6
Key unit Competence: Take appropriate decision on Hydrocele and Testicular torsion				
Learning Objectives				
Knowledge and understanding	Skills	Attitudes and values	Content	Learning Activities
<ul style="list-style-type: none"> - Define Hydrocele and Testicular torsion - Differentiate Hydrocele and Testicular torsion - Describe causes, signs and symptoms Hydrocele and Testicular torsion - Explain the evolution and complications of Hydrocele and Testicular torsion 	<ul style="list-style-type: none"> - Make the adequate diagnosis of Hydrocele and Testicular torsion - Develop a treatment plan of Hydrocele and Testicular torsion 	<ul style="list-style-type: none"> - Demonstrate a grooming appearance - Be responsible and accountable of your actions - Respect dignity and autonomy of the clients - Demonstrate communication and collaboration skills 	<ul style="list-style-type: none"> - Definition of Hydrocele and Testicular torsion - Causes and Description of signs and symptoms of Hydrocele and Testicular torsion - Adequate surgical diagnosis; - Treatment plan to Hydrocele and Testicular torsion - Evolution and complications of Hydrocele and Testicular torsion 	<ul style="list-style-type: none"> - By watching video, Group discussion using written case studies, learners outline signs and symptoms, , diagnosis and treatment of Hydrocele and Testicular torsion - In the real context (Health posts, Health Centers, district hospitals), students practice the management of hydrocele and Testicular torsion on real patients
Links to other subjects: Human anatomy and physiology, Health assessment, Fundamental of Nursing, Pharmacology				
Assessment criteria: Learner - takes appropriate decision on case management on hydrocele and Testicular torsion				
Materials: Chart on Hydrocele and Testicular torsion, written case studies on Hydrocele and Testicular torsion; text books, mannequins				

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5. APPENDICES

Appendix A: WEEKLY TIME ALLOCATION FOR ASSOCIATE NURSING PROGRAM

No	Subjects	Weight	WEEKLY ALLOCATION			TIME
			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		100	60	60	60
Total number of contact/years			2340	2340	2340
Total number of contact hours/year (39 weeks)			1560	1560	1560

Appendix B: Surgical Pathology Overview

Topic	Sub-topics	Key competencies		
		S4	S5	S6
SURGICAL PATHOLOGIES	Local surgical Pathologies		Take appropriate decision on different local surgical pathologies	
	Common Locomotor traumatism		Take appropriate decision on different locomotor traumatism	
	Common surgical pathologies of digestive system.			Take appropriate decision on different surgical pathologies of digestive system
	Common surgical pathologies of urogenital system.			Take appropriate decision on different surgical pathologies of Urogenital system