GEOGRAPHY SYLLABUS FOR TTCs

OPTION: SOCIAL STUDIES EDUCATION

YEAR 2 & 3

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FOREWORD

Rwanda Education Board is honored to avail the Geography Syllabus for Teacher Training Colleges (TTCs). This document serves as official guide to teaching and learning of Geography in TTCs.

The Rwandan education philosophy is to ensure that young people at every level of education achieve their full potential in terms of relevant knowledge, skills and appropriate attitudes that prepare them to be well integrated in society and exploit employment opportunities.

The ambition to develop a knowledge-based society and the growth of regional and global competition in the labour market, has necessitated the shift from knowledge to competence based curriculum in TTCs. The TTC curriculum was revised to align it to the Competence-Based Curriculum for basic education to prepare teachers who are competent and confident to implement CBC in pre-primary and primary education. The rationale for the changes in the curriculum is to ensure that TTC leavers are qualified for job opportunities and further studies in Higher Education in different programs under education career advancement.

I wish to sincerely express my appreciation to the people who contributed towards the development of this syllabus, particularly, Consultants, REB staff, UR-CE Lecturers, TTC Tutors, Teachers from general education and experts from Local and international Organizations for their technical support. A word of gratitude goes to the Head Teachers and TTCs principals who availed their staff for various revision activities.

Special appreciation goes to the Development Partners such as UNICEF, IEE, USAID/Soma Umenye, Save the Children and Right To Play for their financial support.

I take this opportunity to call upon all educational stakeholders to bring in their contribution for successful implementation of this Syllabus.

Dr. MBARUSHIMANA Nelson

Director General

ACKNOWLEDGEMENTS

I wish to sincerely express my special appreciation to the people who played a major role in development of Geography syllabus. It would not have been successful without the support from different education stakeholders. My thanks first go to the leadership of UR-CE who started the review of the TTC curriculum in 2015.

I wish also to thank Rwanda Education Board (REB) leadership who took over and supervised the curriculum review process. I wish to extend my appreciation to Consultants, REB staff, Lecturers from UR-CE, TTC Principals, TTC Directors of Studies, Deputy Principals, Tutors and Teachers from secondary general Education whose efforts during the revision process were much valuable.

Special thanks go to UNICEF who funded the development, designing finalization and printing of this syllabus.

I owe gratitude to different education partners more especially USAID-Soma Umenye, Save the Children, Right To Play, Help a Child, Aegis Trust,Humanity and Inclusion, Flemish Association for Development Cooperation and Technical Assistance (VVOB), Voluntary Service Overseas (VSO), Teach Rwanda and IEE for their technical support

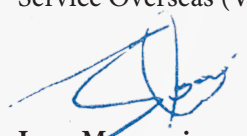

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TABLE OF CONTENTS

FOREWORD iii

ACKNOWLEDGEMENTS iv

1. GENERAL INTRODUCTION 1

1.1. Rwanda education sector objectives 1

1.2. Level Competences of Pre-primary and Primary Teacher Education in the Republic of Rwanda 2

1.3. Background to curriculum review 2

1.4. Rationale of teaching and learning geography 3

1.4.1. Geography and Society 3

1.4.2. Geography and Student Teachers 3

1.5. Professional standards and competences 4

1.5.1. Competences 4

1.5.2. Teaching profession standards 4

1.5.3. Broad geography competences 6

1.5.4. Geography and developing competences 6

2. PEDAGOGICAL APPROACH 8

2.1. Role of the Student-Teacher 8

2.2. Role of the Tutor 9

2.3. Special needs and inclusive education approach 9
2.4. Skills laboratory pedagogy (skills lab) 10
3. ASSESSMENT APPROACH 11
3.1. Types of assessment 11
3.1.1. Formative Assessment 11
3.1.2. Summative Assessments: 12
3.2. Record Keeping 12
3.3. Item Writing in Summative Assessment 12
4. RESOURCES 14
4.1. Materials Needed for Implementation 14
4.2. Human resources 14
5. SYLLABUS UNITS 15
5.1. Geography syllabus units for year two 15
5.1.1. Key competences for end of year two 15
5.1.2. Syllabus units for year two 16
5.2. Geography syllabus units for year three 51
5.2.1. Key competences for end of year three 51
5.2.2. Syllabus units for year three 51

6. REFERENCES 64
7. ANNEXES 66
7.1. TTC subjects and time allocation 66
7.2. Geography overviews for TTC 68

1. GENERAL INTRODUCTION

1.1. Rwanda education sector objectives

The Education Sector objectives are the reference point for the inclusion of education issues into other Rwandan policy documents. These objectives are aligned with those recommended in the Eastern African Curriculum Framework proposals. The Government of Rwanda through law number 36/2018 of 29th June, 2018 determining the organization of education revised the objectives of the sector. They are to:

1. Provide Rwandans with adequate skills at all levels of general, professional as well as technical and vocational education;
2. Offer quality courses and education at all levels;
3. Promote science, technology and research in order to equip many Rwandans with capacity to speed up national development;
4. Promote the culture of peace, tolerance, justice, respect for human rights, solidarity, democracy and that of avoiding any form of discrimination or favouritism;
5. Provide each Rwandan with an integrated education based on ethical values, science and social welfare and directed towards building a nation to ensure its sustainable development;
6. Instill into Rwandans the love of a job well done, the value of hard work, punctuality and promotion of competence;
7. Train the Rwandan to have freedom of thought, be innovative, have abilities to acquire and be analytical towards other people's opinions and to communicate his or her own ideas, to be patriotic and encourage him or her to be updated on the situation prevailing elsewhere;
8. Eliminate all grounds and obstacles that hinder the development of girls and women education as well as of any other groups that need special attention.

These objectives and associated strategies are the backbone for developments in education including the curriculum and assessment policy and the curriculum framework.

1.2. Level Competences of Pre-primary and Primary Teacher Education in the Republic of Rwanda

As stated earlier, Pre-primary and Primary Teacher Education is under the responsibility of Rwanda Education Board. The following are the competences of Teacher Education. By the time a student teacher is exiting the college after three years he or she should:

- Be a qualified teacher who can compete not only locally but regionally and internationally;
- Have professional ethics and develop an inquiring mind for innovative education;
- Be prepared adequately for efficiency in education, administration, management, evaluation and measurement;
- Be competent, reliable, honest and responsible.
- Be equipped with potentials that enable him/her to explore the learners‟ abilities and interests
- Be able to develop the child's ability in critical thinking, free expression and ideas.

1.3. Background to curriculum review

The geography syllabus is developed for TTC student-teachers in the option of Social Studies Education where Geography is a core subject in Year 2 and Year 3. The motive of reviewing the syllabus was to ensure that the syllabus is responsive to the needs of the student-teacher and to shift from objective and knowledge-based learning to competence-based learning. Another reason was to align the TTC curriculum to the CBC in general education. Emphasis in the review was put more on skills and competences as well as the coherence within the existing content by drawing on the previous syllabus and benchmarking with syllabi elsewhere with best practices.

The geography syllabus guides the interaction between the tutor and student -teachers in the learning processes and highlights the competences a student teacher should acquire during and at the end of each unit of learning. Student- teachers will have the opportunity to apply geography in different contexts, and see its importance in daily life. Tutors should help the student- teachers appreciate the relevance and benefits for studying geography.

The learning of the student teacher is influenced by many factors such as curriculum relevance, necessary and sufficient pedagogical approach by tutors, assessment strategies and sufficient instructional materials. With review of the geography syllabus, these factors have been aligned with the competence-based curriculum for general education. This will lead to having qualified and competent teachers who are ready to implement the competence based curriculum for pre and primary education. This implies equipping student teachers with relevant knowledge, skills, attitude and values necessary to make them competitive on local, regional and global job market. This revised syllabus will allow future teachers to contribute to the development of equity and quality education at pre/primary levels and then it will enable student teachers to go for further studies.

1.4. Rationale of teaching and learning geography

Geography is the study of the earth, including all the phenomena which make up the physical and human environment. Geography is one of the disciplines that are concerned with the real world in which the student-teachers live and are capable of solving problems and developing knowledge, skills, attitudes and values which are relevant to their present and future lives and profession.

Geography helps the student-teachers to understand physical and social environment in order to build unity in diversity. It also motivates the student-teachers to discover about the real world and enables them to recognize the importance of the sustainable development for the future of mankind. Geography also helps the student-teachers to develop generic competence skills, literacy and numerical skills to interpret the human and physical phenomena, maps, photographs and diagrams.

1.4.1. Geography and Society

Geography is key to the Rwandan education ambition of developing a knowledge-based and technology-led economy since it provides to student teachers all required knowledge and skills to be used in different learning areas. Therefore, it is an important subject as it supports other subjects. This TTC geography syllabus is intended to address gaps in the current syllabus which lacks adequate and appropriate knowledge, skills, attitude and values.

1.4.2. Geography and Student Teachers

Student-teachers need enough basic Geographical competences to be effective members of Rwandan society including the ability to understand the physical and social environment in which they are growing up and appreciate the diversities/ differences and similarities in the communities, country, region, continent and the world.

Therefore, Geography equips student teachers with knowledge, skills and attitudes necessary to enable them to succeed in an era of rapid technological growth and socio-economic development. Mastery of basic geographical knowledge, skills and experiences makes student teachers being confident in problem solving. It enables the student teachers to be systematic, creative and self-confident in using geographical tools and techniques to demonstrate and interpret geographical phenomena, think critically and develop imagination, initiative and flexibility of mind. In this regard, learning of Geography develop the student-teachers' critical thinking mind that will enable them to participate in the development of the country and to face the major challenges like environment degradation and overpopulation.

As new technologies have had a dramatic impact on all aspects of life, wherever possible in geography, student-teachers should gain experience of a range of ICT equipment and applications.

1.5. Professional standards and competences

1.5.1. Competences

Competence is defined as the ability to perform a particular task successfully, resulting from having gained an appropriate combination of knowledge, skills, attitudes and values. The present syllabus gives the opportunity to student teachers to develop different basic competences as well as the generic competences.

Broad subject competences are highlighted and broken into key competences for each year, these are further broken into key unit competences which are finally split out into learning objectives (knowledge, skills, attitudes and values) in every of learning unit.

Taking into account the rationale behind the overall TTC curriculum review as well as the parameters and constraints of the local context, student-teachers will be equiped with professional standards and generic competences.

For student teachers, professional standards are acquired through generic competences and professional practices that are emphasized and reflected in the learning process. The Geography tutors will ensure that student -teachers are exposed to tasks that help them acquire these competences.

1.5.2. Teaching profession standards

These refer to the characteristics that all teachers globally should have. All teachers in Rwanda should have the six characteristics listed below:

i) The teacher has knowledge of CBC and how to implement it

The teacher has an understanding of CBC and how it works. He/she has knowledge of basic and generic competences and is able to integrate the cross cutting issues within and across subject area.

ii) The teacher as an educator

The professional teacher enhances and stimulates cognitive, social-emotional, physical and moral development of the children. S/he therefore has a thorough understanding of the child's background, interests, motivations and problems and can adjust his/her actions and the learning environment to the different needs of the students. A competent educator is a role model, showing desired behaviour and values. S/he guides and coaches the students to become social, self-confident, independent, responsible, open-minded and innovative

people. In order to be an educator, the student teacher should be supported to develop cooperation, inter personal and lifelong learning skills.

iii) The teacher as subject expert

The professional teacher stimulates the student's critical thinking, problem solving and creativity. S/he uses teaching/learning methods and techniques that are appropriate to preprimary and primary education; S/he applies relevant content, plans lessons, integrating play-based strategies in teaching and learning. The teacher in preprimary and primary education has a thorough geography knowledge that enables him/her to develop teaching/learning materials and in lesson planning so as to effectively deliver the lesson and connect with daily life activities in preprimary and primary education using the language of instruction correctly. The teacher as a subject-expert in upper primary education stimulates English in the teaching/learning process by considering the transition from Kinyarwanda to English as a medium of Instruction in upper primary.

The teacher as a subject expert knows and uses appropriate methods/techniques to assess students and give constructive feedback to the whole class. The teacher is able to link the content of her/his subject specialization with other subjects and connect it with real life situations.

iv) The teacher as a communicator

The professional teacher displays a good example in expressing him/herself, stimulates and enhances positive and clear communication between him/herself and the students, between the students, college community and the wider society. A good communicator is open-minded and respects diversity within and around the college. This requires students to communicate in the official languages.

v) The teacher as a guide and an organizer

The professional teacher facilitates the holistic development of all students, taking into account the differences between them. S/he ensures that the learning environment (class or playground) is well maintained and conducive for expected learning outcomes. This requires the teacher to be equipped with managerial skills.

vi) The teacher as an innovator, researcher and reflective practitioner

The professional teacher looks for ways to improve his/her teaching, and the wellbeing and results of the students. S/he is a reflective practitioner and knows how to perform small-scale reflective actions.

The acquisition of such skills will require teachers to update knowledge and skills with minimum external support and to cope with evolution of knowledge advances for personal fulfillment in areas that need improvement and development, thus becoming lifelong learners.

1.5.3. Broad geography competences

At the end of the three years the student teacher should be able to:

- Demonstrate greater understanding of the basic concepts in physical and human geography.
- Categorise different physical geographical phenomena and their impact on the sustainable development.
- Appreciate the relationships between the physical and human aspects in the world, and acquire a commitment to the sustainable development.
- Explain the correlation between the physical environment and man's modifications to it.
- Demonstrate an understanding of the global sustainable growth, conservation, reconstruction and development of the country in the regional and global context.
- Evaluate accurately the socio-economic problems of the world and how to solve them.
- Develop learners' abilities to gain more concrete understanding of the challenges to the development of Rwanda and other countries.
- Demonstrate a range of skills and techniques necessary to carry out geographical research and interpretation of the geographical data and information.
- Read and interpret the maps and the photographs using the appropriate geographical techniques.
- Use field work procedures and methods in collecting the geographical data.
- Develop a variety of other skills, including those of the problem solving, critical thinking, communication and cooperation, investigation and how to present their conclusions in the most appropriate way.

1.5.4. Geography and developing competences

The national policy documents based on national aspirations identify some 'basic competences' alongside the 'generic competences" that will develop higher order thinking skills and help student teacher learn subject content and promote application of acquired knowledge and skills.

Through research, using textbooks and other geographical documents, internet, observation, group discussions and presentations, the student teacher will not only develop deductive and inductive skills but also acquire cooperation and communication, critical thinking and problem solving skills. This will be realized when student-teachers make presentations leading to inferences and conclusions at the end of learning unit. This will be achieved through student teachers' group work and cooperative learning which in turn will promote interpersonal relations and teamwork.

The acquired knowledge in learning geography should develop a responsible citizen who adapts to scientific reasoning and attitudes and develops confidence in reasoning independently. The student-teacher 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. PEDAGOGICAL APPROACH

The change to a competence-based curriculum is about transforming learning, ensuring that learning is deep, enjoyable and habit-forming.

2.1. Role of the Student-Teacher

In the competence-based syllabus, the student teacher is the principal actor of his/her education. He/she is not an empty bottle to fill. Taking into account the initial capacities and abilities of the student teacher, the syllabus suggests under each unit, some activities of the student teacher and they all reflect his/her active participation in the learning process.

The teaching and learning processes will be tailored towards creating a student teacher friendly environment basing on the capabilities, needs, experience and interests.

The following are some of the roles or the expectations from the student teachers:

- Student teachers construct the knowledge either individually or in groups in an active way. From the learning theory, they move in their understanding from concrete to abstract. Therefore, the opportunities should be given to student teachers to research through fieldwork, and geographical documents.
- Student teachers are encouraged to use maps, photographs, videos, graphs and charts as tools needed to make his lessons more comprehensive.
- Student teachers work on one competence at a time to form concrete units with specific learning objectives (knowledge, skills and attitude).
- Student teachers will be encouraged to do research and present their findings through group work activities.
- A student teacher is cooperative: They work in heterogeneous groups to increase tolerance and understanding.
- Student teachers are responsible for their own participation and ensure the effectiveness of their work.

2.2. Role of the Tutor

In the competence-based syllabus, the tutor is a facilitator, organizer, advisor, and conflict solver. The specific duties of the tutor in a competence-based approach are the following, Tutor is:

- a facilitator, his/her role is to provide opportunities for student teachers to meet problems that interest and challenge them and that, with appropriate effort, they can solve. This requires an elaborated preparation to plan the activities, the place they will be carried, the required assistance;
- an organizer: his/her role is to organize the student- teachers in the classroom or outside and engage them through participatory and interactive methods through the learning processes as individuals, in pairs or in groups. To ensure that the learning is personalized, active and participative, co-operative the teacher/tutor must identify the needs of the student teachers, the nature of the learning to be done, and the means to shape learning experiences accordingly;
- an advisor: he/she provides counseling and guidance for student-teachers in need. He/she comforts and encourages student teachers by valuing their contributions in the class activities;
- a conflict-solver: most of the activities are performed in groups. The members of a group may have problems such as attribution of tasks; they should find useful and constructive the intervention of the teacher as a unifying element.
- asked for help only when the whole group agrees to ask a question
- ethical and preaches by examples by being impartial, by being a role-model, by caring for individual needs, especially for slow student teachers and those with physical impairments, through a special assistance, by providing remedial activities or reinforcement activities.

2.3. Special needs and inclusive education 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 student teachers 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.

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

needs is provided for in the guidance for teachers. The tutor is advised to work closely with the tutor of special need education to provide appropriate support to any identified student -teacher's needs.

2.4. Skills laboratory pedagogy (skills lab)

Student teachers should have time to research, experiment and practice what has been taught in small groups in order to enhance the acquisition of competences. This is called "Skills Laboratory" or "Skills Lab. No special facilities or equipment is required for Skills Lab. In order for the students to learn programs focused on developing transferable 21st century skills, the pedagogical structure of skills lab is provided in the learning activities.

Skills lab is when student teachers are required to complete learning activities working in small groups. The skills lab is an easy method to change teacher's pedagogy from theory-based to competence-based instruction. Skills lab ensures teachers are accountable to completing all the learning activities and projects as outlined in the syllabus.

The basic characteristics of Skills Lab are:

- Students work in small groups (manageable teams)
- Assessment takes place through portfolio activities
- Students talk more than teachers (10% tutor talk time and the rest is for the students)
- Students receive constructive feedback on their work (Tutor gives quality feedback on student presentations).
- Skills lab consists of three components: build, practice and present.

Skills lab is the time when lesson combines the competences acquired during the unit and previous units to make learning more practical. Thus, at the end of every unit, this syllabus provides /suggest skills lab pedagogy lesson to ensure practical application of the competences acquired.

3. ASSESSMENT APPROACH

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

3.1. Types of assessment

There are two major types of assessment namely formative and summative assessments. Any form of assessment should reflect the three domains of learning, which are Cognitive, Psychomotor and Affective

- Knowledge and understanding: Does the student- teacher demonstrate an understanding of the subject concept? Indicators: correctness of answers, coherence of ideas, logical reasoning, use the concepts correctly among others.
- Practical skills: How does the student teacher perform on aptitude and practical tests? Indicators: accuracy, using appropriate methods, quality product, speed and efficiency, coherence among others.
- Attitude and values: How does the student-teacher respond to a task or a situation? What is the student-teacher's behavior? How the student-teacher persists on solving a given problem?

3.1.1. Formative Assessment

Formative assessment helps to check the efficiency of the process of learning. It is done within the teaching/learning process.

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

3.1.2. Summative Assessments:

When assessment is used to record a judgment of a competence development or performance of the student teacher, it serves a summative purpose. Summative assessment gives a picture of a student teacher's competence or progress at any specific moment. The main purpose of summative assessment is to evaluate whether competences have been achieved and to use the results for ranking or grading of student teachers, 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. It can be internal College based assessment or external assessment in the form of national examinations. College based summative assessment should take place once at the end of each term and once at the end of the year. College summative assessment average scores for the subjects which are examined at the national level will be weighted and included in the final national examinations grade. For the subjects which are not examined externally the grade should be part of the continuous assessment reflected in the student's transcript.

3.2. 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 generate data in the form of scores which will carefully be recorded and stored in a portfolio. The latter is used in deciding remedial actions, alternative instructional strategy as well as feed back to the student teacher. The records are also important to parents to check the learning progress and to advice accordingly. Finally, the records are very essential to the final assessment of professional practice of the student teacher at the end of the college.

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

3.3. 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 revised 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 also testing broad, subject and generic competences as stated in the syllabus.

4. RESOURCES

4.1. Materials Needed for Implementation

The following list shows the main materials/equipment needed in the learning and teaching process:

- Physical, human and economic wall maps of Rwanda, different continents and the world.
- Textbooks, reference books, newspapers, maps, atlas, charts and globes.
- Software materials: computer, video clips, projector and internet.
- Photographs (ground, aerial and oblique).
- Models from the local environment (rocks, minerals, soils samples).
- Ordinary Survey Maps (O.S.M).
- Measuring instruments like rain gauge, thermometer, barometer, hygrometer, wind vane, anemometer, compass, clinometers and GPS.
- Stationary like manila papers, flip charts, etc.
- Adaptive materials like tactile and talking materials like talking globe, tactile maps, tactile illustrations, brailed equipment and materials.

4.2. Human resources

For effective and efficient teaching of this geography syllabus, it is to be noted that:

- The teacher should at least have a degree in geography with education as a teaching subject from a recognised university.
- The teacher should have proven ability to use text books, teachers' guide, geographical magazines and other sources of geographical information that are in line with this Advanced level geography curriculum.
- The teacher should be fluent in English, which is the language of instruction.
- The teacher should have some basic skills and knowledge in special needs education like Rwandan sign language, Braille reading and writing.
- The teacher should be able to modify the methodology to accommodate the diverse needs of the learners in the class.

5. SYLLABUS UNITS

5.1. Geography syllabus units for year two

5.1.1. Key competences for end of year two

- Explain different physical geographical phenomena and their impact on the sustainable development in the world.
- Explain different problems associated with the physical, human and economic environment of the world and suggest solutions.
- Evaluate the major challenges related to the population growth and exploitation of the resources in the world.
- Compare different modes of development in the world.
- Use statistical diagrams and maps to interpret the geographical information.

5.1.2. Syllabus units for year two

<table>
<tr><td colspan="2">Subject: Geography</td><td>Year: 2</td><td colspan="2">Option: Social studies Education</td></tr>
<tr><td colspan="2">Topic Area: Practical Geography</td><td colspan="3">Sub-topic Area: Statistics</td></tr>
<tr><td colspan="4">Unit 1: Statistical Graphs and Diagrams</td><td>No. of periods: 11</td></tr>
<tr><td colspan="5">Key unit competency: The student-teacher should be able to interpret the statistical data, construct statistical graphs and diagrams</td></tr>
<tr><td colspan="3">Learning Objectives</td><td rowspan="2">Content</td><td rowspan="2">Learning Activities</td></tr>
<tr><td>Knowledge and Understanding</td><td>Skills</td><td>Attitudes and Values</td></tr>
<tr><td>– State the advantages and disadvantages of the statistical graphs and the diagrams.
– Identify the importance of statistics in geography.
– Outline the different statistical methods.</td><td>– Create the statistical graphs and diagrams to present the various geographical data.
– Explain the advantages and disadvantages of the various statistical graphs and diagrams.
– Draw the different statistical graphs and diagrams.</td><td>– Appreciate the importance of statistics in geography and in the daily life activities.
– Show respect for the statistical data and the statistical methods.</td><td>Introduction to the statistics in Geography.
– Definition of the statistics.
– Importance of the statistical graphs and the diagrams in geography.
– Line and curve graphs (simple, group, compound, divergence).
– Advantages and disadvantages of each type.</td><td>– Use statistical documents, books and diagrams to research on the definition of statistics, advantages and disadvantages of the statistical graphs and the diagrams. Record the findings.
– In groups, discuss the findings and make a class presentation. Use the statistical data and the diagrams to draw and interpret different bar graphs.
– Use statistical data and the diagrams to draw and interpret the statistical charts.</td></tr>
</table>

– List the advantages and disadvantages of each statistical method.	– Interpret the different statistical graphs and diagrams.		– Bar graphs (simple, group, compound, divergence, age and sex graphs)	
Links to other subjects: *It is related to statistics in Mathematics and Economics.*				
Assessment criteria: *The student.-teachers are able to correctly draw or construct and interpret the statistical graphs and the diagrams.*				
Materials: *Geographical documents, maps, journals, tactile and talking materials, internet, statistical data, diagrams and graph papers.*				

Subject: Geography	Year: 2	Option: Social studies Education
Topic Area: Practical Geography	Sub-topic Area: Map reading and photograph interpretation	
Unit 2: Bearings, directions, distances and areas on a map		No. of periods: 10
Key unit competency: The student-teachers should be able to measure the bearings and the directions, calculate distances and areas on a map.		

Learning Objectives			Content	Learning Activities
Knowledge and Understanding	**Skills**	**Attitudes and Values**		
– Identify the places on a topographic map using Easting and Northing.. – Tell the directions and bearings on the topographic maps. – Estimate the distances and areas on the topographic maps. – Give the areas on the topographic maps.	– Locate the places using the geographical coordinates/grid reference systems. – Calculate the bearings and the directions on the topographic maps. – Measure the distances and the surface areas on the topographic maps.	– Appreciate the importance of using the topographic maps to interpret geographical phenomena and to understand the relationship between relief and the human activities. – Appreciate the relationship between the distance on the actual ground and on the topographic map.	– Location of places using the grid references. – State the directions and bearings on the topographic maps. – Measure the distance on the maps (straight line, curved line). – Calculate the areas on the topographic maps (regular and irregular shapes).	– Use Northing and Easting (grid references) to locate the places on the maps. – Use the topographic maps, mathematical set and drawing equipment to identify and connect points or places on a topographic map. – Use the geographical documents, mathematical equipment like pair of compasses, rulers, protractors and dividers to calculate the directions and bearings on the topographic maps.

	- Calculate the areas on the topographic maps.	- Appreciate the importance of using the geographical coordinates and the compass in locating places on the topographic maps.		– Use a topographic map, the key, the scale and the mathematical set to identify the areas, lines, roads or shapes on the maps, and to measure the distances, and calculate areas on a map. – In groups, discuss the findings and make a class demonstration.
Links to other subjects: *It is linked to bearings, distances and areas in Mathematics*				
Assessment criteria: *The student-teachers are able to measure clearly the bearings, directions; calculate distances and areas on a map.*				
Materials: *Geographical documents, journals, internet, tactile and talking materials, topographic maps, tactile maps, mathematical instruments and graph papers.*				

Subject: Geography	**Year: 2**	**Option: Social Studies Education**
Topic Area: Practical geography	**Sub-topic Area:** Map reading and photograph interpretation	
Unit 3: Map work interpretation		**No. of periods: 10**
Key unit competency: The student-teachers should be able to explain the relationship between the physical aspects and human activities on maps.		

Learning Objectives			**Content**	**Learning Activities**
Knowledge and Understanding	**Skills**	**Attitudes and Values**		
– Identify the physical and human aspects on the ordinary survey maps. – State the relationship between the physical and human aspects on the topographic maps.	– Describe the physical and human aspects on the topographic map. – Describe the relationship among the physical and human aspects on the topographical maps.	– Appreciate the importance of using the topographic maps to interpret the geographical phenomena and to understand the relationship between the relief and human activities.	– Interpretation of the physical aspects from the maps e.g. geology, slope, drainage, soils. – Interpretation of the human aspects from the maps e.g. agricultural development, mining, industry and settlement. – Relationship between the physical and human aspects on the maps (drainage patterns, settlement patterns, vegetation, communication networks).	– Use a topographic map and a key to identify the physical aspects. Observe the features critically and interpret them on a map. Record the observations and identify the links between the physical and human features. – Use a topographic map and the knowledge acquired from the above lessons to find the relationship between the physical and human aspects on a map and write a report.

Links to other subjects: *It is linked to land use/planning in entrepreneurship and general paper.*
Assessment criteria: *The student- teachers are able to analyse and interpret the relationship between the physical and human aspects on the maps.*
Materials: *Geographical documents, internet, journals, tactile and talking materials, topographic maps, tactile maps, mathematical instruments.*

Subject: Geography	Year: 2	Option: SOCIAL STUDIES EDUCATION
TOPIC AREA: Geography	**Sub Topic: Physical geography**	
Unit 4: Universe And The Solar System		**No. of periods: 10**

Key Unit competence: The student-teacher should be able to differentiate the components of the universe and solar system, and explain the effects of the earth movements

Learning Objectives			Content	Learning Activities
Knowledge and understanding	**Skills**	**Attitudes and values**		
– Identify the components of the universe and the solar system. – Identify the planets in the solar system. – State the effects of the earth's movements.	– Describe the planets of the solar system. – Explain the consequences of the earth's movements –	– Respect the earth and appreciate the need for the sustainable practices to protect the environment. – Appreciate uniqueness of the earth in relation to the other planets. – Appreciate the importance of the earth's movements.	– The Universe: – Definition of the universe. – Components of the universe. – The solar system: – Components of the solar system – Earth: peculiar elements of the earth i.e. atmosphere, biosphere, hydrosphere and lithosphere.	– -In groups, student-teachers brainstorm about the meaning and the components of the universe and harmonize the findings after the class presentation. – Using internet, textbooks, globe and different photos, student-teachers identify the planets in the solar system and the elements of the Earth. – Using videos, student-teachers, explain the consequences of the Earth movement.

			– Earth's movements: – Rotation and its effects, Time zones. – Revolution and its effects.	
Assessment criteria: *The student-teacher is able to correctly differentiate the components of the universe and solar system, and explain the effects of the earth movements accurately.*				
Links to other Subjects: *This unit is linked to social studies in primary schools.*				
Resources: *Internet, textbooks, globe and different photos and movies.*				

Subject: Geography	**Year: 2**	**Option: Social studies Education**
Topic Area: Physical Geography	**Sub-topic Area:** Understanding the earth and universe	
Unit 5: The Origin of the Earth		**No. of periods: 9**

Key unit competency: The student-teachers should be able to discuss the theories for the origin of the Earth.

Learning Objectives			**Content**	**Learning Activities**
Knowledge and Understanding	**Skills**	**Attitudes and Values**		
– Explain the origin and gravity of the earth. – Outline the evidences to prove that the earth is spherical/geoid. – Explain the internal structure, mineral composition and the superficial configuration of the earth.	– Apply the knowledge to explain how the earth came into existence. – Explain the evidences which prove that the earth is spherical / geoid. – Carry out a research to find the internal structure, mineral composition and the superficial configuration of the earth.	– Appreciate the importance of the earth as the only planet in the solar system that supports life. – Show concern in protecting the earth as the only home for flora and fauna.	– Theories which explain the origin of the earth (the big bang theory, the creation theory/biblical theory). – The characteristics of the earth. – The shape and the evidence to prove that the earth is spherical (size, diameter, circumference, volume, mass and gravity of the earth). – The internal structure of the earth. – Mineral composition.	– In individual research, use the documents, internet, the globe and the satellite photos to research on the theories which explain the origin of the earth, the shape of the earth and the evidences to prove that the earth is spherical. Record the findings. – Make groups to discuss the findings and then present in the class, involve the Q&A session. – Do research using internet and textbooks about the internal structure, mineral composition and the superficial configuration of the earth. Write down the findings. – In groups, discuss and compile the above findings for a class presentation supported by Q&A methodology.

Links to other subjects: *It is linked to size, diameter, circumference, volume, mass and gravity in Mathematics and Physics.*

Assessment criteria: *The student-teachers are able to describe and explain the different theories of the earth's origin and the mineral composition.*

Materials: *Geographical materials, maps, tactile and talking materials, globes, atlases, journals, photographs, internet/Jaws software and local environment.*

Subject: GEOGRAPHY	Year: 2	Option: SOCIAL STUDIES EDUCATION
Topic Area: Physical Geography	**Sub-topic Area:** Landform evolution and processes	
Unit 6: Internal landform Processes 6.1. Faulting		**No. of periods : 9**
Key unit Competency: The student-teachers should be able to examine the internal processes responsible for the evolution of different relief landforms.		

Learning Objectives			Content	Learning Activities
Knowledge and Understanding	**Skills**	**Attitudes and Values**		
– Recall the processes leading to the formation of different faulted features. – -Identify the major types of faults and the impact of faulting on the landscape and on drainage.	– Explain the processes responsible for the formation of different faulted landforms. – Investigate the impact of different faulted landforms on the landscape and on drainage	– Appreciate the impact of the internal processes on the landscape. – Appreciate the impact of faulted landforms on the landscape and on drainage	– Faulting: definition. – Processes leading to the formation of different faulted features. – Types of faults. – Influence of faulting on the landscape. – Influence of faulting on the drainage.	– Use a range of different geographical sources and the materials like internet, text books research on the processes of faulting, types of faults and the major faulted landforms. Write down the findings. – In group work, discuss the findings and make a class presentation. – Use the knowledge acquired from the previous lesson and research from the text books and internet to find about the impacts of faulting on the landscape – In groups, discuss the findings and make a class presentation.

Links to other subjects: *It is linked to compressional and tensional forces in Physics and drawing and design in Fine Art.*
Assessment criteria: *The student-teachers are able to correctly interpret the internal processes responsible for the evolution of different faulted landforms.*
Materials: *Geographical documents, photographs, maps, journals, atlas, local environment, charts, internet website /jaws software, tactile and talking materials.*

Subject: GEOGRAPHY	**Year: 2**	**Option: SOCIAL STUDIES EDUCATION**
Topic Area: Physical Geography	**Sub-topic Area:** Landform evolution and processes	
Unit 6: Internal Landform Processes 6.2. Folding and warping		**No. of periods: 9**
Key unit competency: The student-teachers should be able to examine the internal processes responsible for the evolution of different relief landforms.		

Learning Objectives			**Content**	**Learning Activities**
Knowledge and Understanding	**Skills**	**Attitudes and Values**		
– Recall the processes of the folding, types of folds and its influence on the landscape – Identify the major landforms associated with the folding. – Define warping and the associated landforms. – State the influence of warping on the drainage.	– Explain the processes responsible for the folding. – Explain the impact of the different folded landscapes. – Explain the impact of warping and associated landforms. – Describe the influence of warping on the drainage	– Appreciate the importance of folding on the landscape. – Understand other perspectives responsible for the formation of different folded landforms.	– Folding: o Definition. o Processes of folding (types) o Impact of folding on the landscape. - Warping: o Definition, types and causes of warping. o Landforms associated with warping. o Influence of warping on the drainage.	– Use a range of different geographical sources and the materials like internet, text books to research on the processes of folding, and warping and folding impacts on the landscape. Write down the findings. – In groups, discuss the findings from the above research and make a class presentation followed by Q&A.

Links to other subjects: *It is linked to drawing and design in Fine Art.*
Assessment criteria: *The student-teachers are able to correctly describe the internal processes responsible for the evolution of different folded landforms.*
Materials: *Geographical documents, maps, atlas, photographs, tactile and talking materials, journals, internet website /jaws software and local environment*.

Subject: GEOGRAPHY	Year: 2	Option: SOCIAL STUDIES EDUCATION
Topic Area: Physical Geography	**Sub-topic Area:** Landform evolution and processes	
Unit 6: Internal Landform Processes. 6.3. Vulcanicity and earthquakes		**No. of periods: 11**
Key unit competence: The student-teachers should be able to examine the internal processes responsible for the evolution of different relief landforms.		

Learning Objectives			Content	Learning Activities
Knowledge and Understanding	**Skills**	**Attitudes and Values**		
– Define vulcanicity, volcanicity and recall the volcanic processes. – Identify the major landforms associated with vulcanicity and volcanicity. – State the types of volcanoes and their characteristics. – State the impact of volcanicity on drainage and man. – Identify the major volcanic regions in the world. – Define the concept of earthquakes – Explain the causes and effects of earthquakes	– Explain the processes responsible for the formation of different intrusive and extrusive landforms. – Describe the different relief landforms associated with the intrusive and extrusive processes. – Carry out a research on the types and characteristics of volcanoes. – Explain the impact of different volcanic landforms. – Locate the major volcanic regions. – Investigate the causes and effects of earthquakes.	– Appreciate the importance of vulcanicity in shaping the landscape. – Appreciate the perspectives responsible for the formation of different volcanic landforms. – Show concern for the causes and the consequences of earthquakes, and devise emergency and preparedness measures.	– Vulcanicity and Earthquake. – Processes of vulcanicity and volcanicity, materials of vulcanicity (magma, lava, gases). – Intrusive and extrusive features. – Types of volcanoes and their characteristics (active, dormant, extinct).	– Use a range of different geographical sources and the materials like internet, text books to research on the process of vulcanicity, volcanicity, the materials of vulcanicity, intrusive and extrusive features and the types of volcanoes. – In group work, discuss the findings from the above research and make a class presentation. – Use the knowledge acquired from the previous lesson and do research from the textbooks and internet on the impact of vulcanicity on drainage and man; and the distribution of volcanoes in the world. Record the findings.

			– Influence of volcanicity on drainage. – Impact of volcanicity on man (positive and negative). – World distribution of volcanoes – **Earthquakes** – Definition of concepts: (Focus, epicentre, magnitude) – Causes and consequences	– In groups, discuss the findings and make a class presentation supported by Q&A session. – In group use geographical documents to research on the causes and effects of earthquakes.
Links to other subjects: *It is linked to waves (primary and secondary waves), magnitude, intensity, convective currents, heat and pressure in Physics.*				
Assessment criteria: *The student-teachers are able to investigate the causes and consequences of vulcanicity and earthquakes on the landscape.*				
Materials: *Geographical documents, journals, tactile and talking materials, maps, atlas, photographs, local environment, charts, avocado and internet website /jaws software.*				

Subject: GEOGRAPHY	**Year: 2**	**Option: SOCIAL STUDIES EDUCATION**
Topic Area: Physical Geography	**Sub-topic Area:** Soils	
Unit 7: Soils		**No. of periods: 8**

Key unit competency: The student-teachers should be able to investigate the different constituents and morphological properties of the soil

Learning Objectives			**Content**	**Learning Activities**
Knowledge and Understanding	**Skills**	**Attitudes and Values**		
– State the constituents of the soil. – Outline different morphological properties of the soil.	– Investigate the constituents of the soil. – Describe the properties of the soil.	– Appreciate the importance of soil constituents and the morphological properties of the soil. – Arrange and categorise the soils according to their morphological properties.	**Soils:** – Soil constituents (air, humus, water, rock particles, living organisms). **Morphological properties of soil:** – Soil structure, texture, colour, porosity, pH, soil consistency, – Soil profile and soil catena. – Soil fertility (factors affecting soil fertility).	– Use textbooks and internet to research on the constituents of the soil and the morphological properties of the soil. Write down the findings. – In groups, discuss the findings for a class presentation. – In groups, discuss the concepts of soil profile, soil structure, soil texture, soil porosity, soil pH, soil catena and the soil fertility. Write down the findings and make a class presentation supported by Q&A.

Links to other subjects: *It is linked to acids and bases in Chemistry and Pedology in Biology.*

Assessment criteria: *The student-teachers are able to investigate the soil constituents and their morphological properties.*

Materials: *Documentaries, journals, soil maps, soil samples, photographs, atlas, internet, local environment, tactile and talking materials.*

Subject: Geography	Year: 2	Option: Social Studies Education
Topic Area: Physical Geography	**Sub-topic Area:** Weather and climate	
Unit 8: Weather and Climate of the world		**No. of periods: 14**

Key unit Competency: The student-teachers should be able to appreciate the importance of the atmosphere, weather and the impact of climate on the environment and human activities in the world.

Learning Objectives			Content	Learning Activities
Knowledge and Understanding	**Skills**	**Attitudes and Values**		
– Define the atmosphere. – State the layers of the atmosphere. – Define the structure of the atmosphere. – Identify the importance of the atmosphere. – Identify the composition of the atmosphere. – Define the concept of weather and climate and identify their elements. – List the factors that influence the world climate. – Name the major climatic zones of the world and outline the characteristics of each zone. – State the influence of climate on human activities.	– Infer the influence of the layers of the atmosphere to the changes in the atmosphere's conditions. – Explain the structure of the atmosphere. – Explain the importance of the atmosphere. – Describe the composition of the atmosphere. – Differentiate weather from climate and differentiate the weather elements. – Explain the factors influencing the climate of the world.	– Show resilience for the changes in the atmosphere and the desire to protect it. – Appreciate the importance of the weather elements on the human activities. – Show the continual desire to interpret the weather conditions based on the knowledge acquired from the topic of the weather and the climate. – Show concern for the causes and the effects of climate change and the desire to preserve or retain the stability of the atmosphere.	– The atmosphere: – Definition of the atmosphere. – The structure of the atmosphere (troposphere, stratosphere, mesosphere, thermosphere), description, composition and the importance of the atmosphere. – Concept of the weather and the climate.	– Do research the concept of the atmosphere, using geographical documents and internet. Record the findings. – In groups, discuss the findings and make a class presentation. – In groups, use the geographical documents, internet and the local environment to research the reasons for the changes in the atmospheric conditions and record the findings. – Make a class presentation followed by Q&A.

	– Locate the major climatic zones on the world map and describe the characteristics of each climatic zone. – Explain the influence of the climate on the human activities.	– Elements of weather and climate (recording instrument) – Factors that influence – world climate: – Types of climate and their characteristics – Influence of the climate on the human activities.		– Use the geographical documents, textbooks, internet, maps and photographs to research on the concepts of the weather and climate. Record the findings. – In groups, discuss the findings and make a class presentation on the harmonised concepts. – Use the knowledge acquired from the previous lesson and the additional research from textbooks, diagrams, photographs and internet, to write about the elements of the weather and climate. Record the findings. – In groups, discuss and compile the above findings and make a class presentation.

				– Use internet and the geographical documents to research on the major climatic zones of the world, their characteristics, factors influencing the climate and the influence of climate on the human activities. Record the findings. – In groups, discuss and compile the above findings and make class presentation followed by Q&A. – In pairs, investigate whether the climate change is having an impact on the weather of the world. Support your argument with evidences and record your findings in a report.
Links to other subjects: *It links to Meteorology, measurement and recording in Physics and Mathematics.*				
Assessment criteria: *The student-teachers are able to interpret the atmospheric phenomena and investigate the impact of the weather and climate on the environment and on the human activities.*				
Materials: *Documents, internet, maps, local environment, instruments (thermometer, rain gauge, barometer), atlas, journals, tactile and talking materials, diagrams and photographs.*				

Subject: GEOGRAPHY	**Year: 2**	**Option: SOCIAL STUDIES EDUCATION**
Topic Area: Physical Geography	**Sub-topic Area:** Vegetation	
Unit 9: Natural Vegetation of the world		**No. of periods: 11**
Key unit competence: The student-teachers should be able to appreciate the distribution of different types of vegetation in the world		

Learning Objectives			**Content**	**Learning Activities**
Knowledge and Understanding	**Skills**	**Attitudes and Values**		
– Identify the types of natural vegetation. – State the characteristics of each type of natural vegetation. – Recall the locations of different types of natural vegetation. – Identify the factors influencing the vegetation distribution. – Outline the importance of the natural vegetation.	– Examine the classifications of the major types of natural vegetation. – Describe the characteristics of each type of natural vegetation. – Explain the location of the major vegetation zones of the world. – Explain the factors influencing the vegetation distribution. – Explain the importance of the natural vegetation.	– Appreciate the importance of the various types of vegetation in the world. – Show resilience for the various types of vegetation and the desire to protect and manage the natural vegetation.	Classification of the natural vegetation. – **Forests** and their characteristics: o Tropical forests: equatorial rain forests, tropical monsoon forests, tropical mountain forests. o Temperate forests: Mediterranean forest, coniferous, deciduous forests. – **Grasslands** and their characteristics: o Tropical zone: savanna humid and savanna dry / steppe.	- Use geographical documents, internet, maps, power point presentation and photographs to research on the types of vegetation, location and their characteristics, and write down the findings. - In groups, discuss and write down the findings and make a class presentation followed by Q&A. - Use documents, text books, internet, maps and photographs to research on the factors influencing the vegetation distribution and the importance of vegetation. Record the findings. - In groups, discuss the findings and make a class presentation.

			○ Temperate zone: steppe, prairies, pampas, downs and veld). ○ Desert vegetation and their characteristics: cold desert vegetation, hot desert vegetation. ○ Tundra vegetation ○ Mountain vegetation and their characteristics. ○ Aquatic/marsh vegetation and their characteristics: swamp vegetation e. g. mangrove vegetation. – Factors influencing the vegetation distribution. – Importance of the natural vegetation.	– Are deforestation and logging activities having an impact on the atmosphere? Support your answer with evidences. – In pairs, record your findings as a poster or a presentation.
Links to other subjects: *It relates to Ecology and Botany (plant species) in Biology.*				
Assessment criteria: *The student-teachers are able to clearly examine the classification and the characteristics of different natural vegetation of the world.*				
Materials: *Geographical documents, internet websites, journals, maps, photographs, atlas, tactile and talking materials, documentary films, diagrams and local environment.*				

Subject: GEOGRAPHY	Year: 2	Option: SOCIAL STUDIES EDUCATION
Topic Area: Human and Economic Geography	**Sub-topic Area:** Population	
Unit 10: Population Growth in the world		**No. of periods: 13**

Key unit competence: The student-teacher should be able to discuss the problem of the population growth and the ways of controlling the population growth in the world.

Learning Objectives			Content	Learning Activities
Knowledge and Understanding	**Skills**	**Attitudes and Values**		
– Mention the population diversity. – Define population concepts. – Locate the population distribution and state the factors that account for the population distribution. – Define under population and over population. – Outline the population problems of the developing and developed countries. – Identify the factors influencing the birth and the death rates. – Outline the factors for a rapid population growth.	– Explain the population diversity. – Differentiate among the concepts of population (optimum population, under population, over population). – Explain the factors influencing the population distribution. – Compare the concepts of under population and over population. – Describe the problems of population in both developed and developing countries. – Explain the factors associated with the birth and death rates.	– Appreciate the importance of human diversity in development. – Show resilience for the diversities in human population. – Show respect to the various policies for controlling the population growth. – Show concern for the causes, effects and the control measures of international migration.	– Human diversities (race, religion, languages and states). – Population concepts: optimum population, under population, over population. – World population distribution and the density: densely populated areas and sparsely populated areas. – Factors for the population distribution.	- Use internet, geographical documents, population maps and photographs to research on the population concepts, world population distribution and the factors for distribution. Record the findings. - In groups, discuss the findings and make a class presentation followed by Q&A.

– List the causes and the effects of a rapid growth, and suggest the control measures. – State the policies of controlling population growth and migration. – Identify the causes and the effects of international migration. – Relate the population concepts of different countries.	– Describe the factors responsible for a rapid population growth. – Explain the effects of a rapid population growth and the control measures. – Apply the knowledge acquired to minimise the rapid population growth. – Explain the causes and the effects of the international migration. – Make a comparison between the population in the developing and the developed countries		– Under population, overpopulation and the related effects. o Causes of rapid population growth. o Effects associated with the rapid population growth. o Ways of controlling the population growth. o Migration: types, causes and the effects of migrations, control measures of migrations.	- Use geographical documents, internet, maps and photographs to research on the meaning and the effects of under population, over population and, the population problems of the developing and developed countries. Write down the findings. - In groups, discuss and compile the findings for a class presentation followed by Q&A. - Use the geographical documents, internet, maps and photographs to research on the factors influencing the birth and death rates, causes and the effects of a rapid population growth and the control measures. Record the findings. - In groups, discuss and compile the findings for a written report.

				- Do research using the geographical documents and internet about the types of migration, causes and the effects and the control measures. Record the findings. - In groups, discuss and compile the findings for a class presentation followed by Q&A.
Links to other subjects: *It links to population in Economics*				
Assessment criteria: *The student-teachers are able to explain the problem of the population growth and the ways of controlling the population in the world*				
Materials: *Geographical documents, internet websites, maps and photographs, local environment, atlas, journals, tactile and talking materials, documentary films, population diagrams and statistical graphs.*				

Subject: GEOGRAPHY	Year: 2	Option: SOCIAL STUDIES EDUCATION
Topic Area: Human and Economic Geography	**Sub-topic Area:** Rural Settlement and urbanisation	
Unit 11: Settlement and Urbanisation in the world		**No. of periods: 11**
Key unit competency: The student-teachers should be able to discuss the impact of settlement and urbanisation on the sustainable development of different countries.		

Learning Objectives			Content	Learning Activities
Knowledge and Understanding	**Skills**	**Attitudes and Values**		
– Identify the major types of settlements. – Outline the factors influencing rural settlements. – Define the terms related to urbanisation. – Identify the factors influencing the urban development in the world. – Describe the impact of the world urbanisation on the environment.	– Explain the major types of settlements. – Explain the factors influencing the rural settlements – Explain the terms related to urbanisation. – Describe the major urban centres and the factors influencing the urban development in the world. – Explain the functions of the world's major cities and ports. – Evaluate the impact of the world's urban centres on the environment.	– -Show concern for the factors influencing rural settlement – Show concern for the problems caused by the urbanisation on the environment.	- Rural settlement. o Types of rural settlement. o Factors influencing the rural settlement. – Urbanisation in the world o Definition of the terms: trading centres, town, town board, municipality, city, agglomeration, conurbation, megalopolis, suburbs, slums, green city.	– Use the geographical documents, text books and internet to research about the types of rural settlements and factors influencing the rural settlements, Write down the findings. – In groups, discuss the findings for a class presentation and engage in Q&A. – Use the geographical documents, textbooks and internet to research on the concept of urbanisation, terms used, types of urban centres, factors influencing the urban development, the effects of urbanisation on the environment and the measures to urban problems. Write down the findings.

			○ Factors influencing the urban development in the world. ○ Impact of the world urbanisation on the environment.	– In groups, discuss the findings for a class presentation. – Use the knowledge acquired from the previous lesson, textbooks and internet to research on the urbanisation concepts – Record the findings. – In groups, discuss and write a report on the findings for a class presentation. – Is urbanisation in the world creating over populated cities? What are the impacts and how can this problem be addressed? In pairs, write a report on the conclusions.
Links to other subjects: *It links to the urban planning and the development in entrepreneurship.*				
Assessment criteria: *The student-teachers are able to clearly explain the impact of the rural and urban settlement on the sustainable development.*				
Materials: *Geographical documents, internet websites, photographs, local environment, atlas, journals, tactile and talking materials, documentary films, urban diagrams and statistical graphs.*				

Subject: GEOGRAPHY	Year: 2	Option: SOCIAL STUDIES EDUCATION
Topic Area: Human and Economic Geography	**Sub-topic Area:** Economic activities and development studies	
Unit 12: Agriculture in the world		**No. of periods: 13**

Key unit competency: The student-teachers should be able to explain the impact of agricultural activities on the sustainable development of different countries in the world.

Learning Objectives			Content	Learning Activities
Knowledge and Understanding	**Skills**	**Attitudes and Values**		
– Name the different types of crop cultivation methods. – Outline the characteristics of the different crop cultivation systems. – State the different types of farming in China. – Outline the factors responsible for increasing the agricultural production. – State the problems affecting the agriculture in the developing countries. – Outline the different plantation crops in different countries.	– Describe the characteristics of the different crop cultivation methods. – Describe the farming methods in China and Russia. – Explain the factors influencing the agricultural activities. – Evaluate the problems affecting the agricultural system in the developing countries. – Compare the plantation agriculture in the different countries of the world.	– Show continual desire to grow different crops using different methods of farming. – Appreciate the reasons for increasing the agriculture production. – Appreciate the different types of livestock farming. – Show respect for the ways of improving the livestock farming. – Appreciate the reasons for rearing a specific type of animals like sheep, cattle.	**Crop Cultivation** – Types of crop cultivation methods and their characteristics. – Subsistence cultivation (shifting cultivation, bush fallowing, small holder, cooperative, plantation), advantages and disadvantages, – Market gardening and horticulture. – Truck farming, factory farming. – intensive subsistence agriculture(collectivisation, communes in China, cooperative farming) – Factors for increasing the agricultural production. – Problems affecting the agriculture in the developing countries.	– Use geographical documents, text books and internet to research about the different methods of crop cultivation and their characteristics, advantages and disadvantages. Record the findings. – In groups discuss and compile the findings from the above research for a class presentation. – Use geographical documents, textbooks and internet to research about the collectivisation, communal farming in China and cooperative farming in Russia. Write down the findings. – In groups, discuss and compile the findings from the above research and make a class presentation.

– State the different types of livestock farming. – Outline the factors and problems affecting the livestock farming.	– Locate different types of livestock. – Explain the factors, problems and the solutions of the livestock farming.		**Livestock Farming** – Types of livestock farming: – Pastoralism: pure nomadism, free Range and transhumance. – Ranching, dairy farming. – Factors and problems affecting the livestock farming and ways of improving the livestock farming.	– Use documents, textbooks and internet to research about the factors for increasing agricultural production and the problems affecting agriculture in the developing countries. Record the findings. – In groups, discuss and compile the findings and make a class presentation. – Use the geographical documents, internet and text books to research on the types of livestock farming methods, factors and problems affecting the livestock and possible solutions. Record the findings. – In groups, discuss and compile the findings from the above research and make a class presentation.
Links to other subjects: *This links to statistics in Maths subject; production trends in Economics; the animal and crop species in Biology.*				
Assessment criteria: *The student-teachers are able to critically explain the impact of agricultural activities on the sustainable development.*				
Materials: *Geographical documents, maps, internet, tactile and talking materials, diagrams, journals, internet and documentaries.*				

Subject: GEOGRAPHY	Year: 2	Option: SOCIAL STUDIES EDUCATION
Topic Area: Human and Economic Geography	**Sub-topic Area:** Economic activities and development studies	
Unit 13 : Mining in the world		**No. of periods: 7**
Key unit competency: The student-teacher should be able to explain the impact of mining on the sustainable development of different countries in the world.		

Learning Objectives			Content	Learning Activities
Knowledge and Understanding	**Skills**	**Attitudes and Values**		
– Identify the distribution of minerals in the world. – List the methods used for mining in the world. – State the factors affecting the mineral exploitation. – Outline the effects of mining to the economies of the world. – Explain mining in relation to the selected countries.	– Locate the major minerals of the world on a map. – Explain the methods used for mining. – Describe the factors affecting the mineral exploitation. – Explain the effects of mining to the economy of a country. – Apply the knowledge to research on the role played by minerals in the sustainable development of different economies of the world.	– Appreciate the role played by nature in the distribution of the minerals in different areas of the world. – Appreciate the importance of minerals for the sustainable development of different areas of the world.	**Mining** – World distribution of the major minerals. – Methods used for mining. – Factors affecting mineral exploitation. – The effects of mining to the economies of the world. – Case study: o Russia o China o South Africa	– Use internet and textbooks, to research on the major minerals of the world, methods used for mining, factors affecting mineral exploitation and the effects of mining. Write down the findings. – In groups, discuss the findings for a class presentation. – In groups, use internet, textbooks and other geographical documents to research on the mining in Russia, China and South Africa for discussions in reference to the knowledge acquired in the current unit and write a report on the findings.

				– Does mining always create greater wealth distribution in mineral rich countries?; Is man over mining the earth?; In pairs, answer these questions supporting your ideas with evidence in your report.
Links to other subjects: *It is linked to the minerals and alloys in Chemistry.*				
Assessment criteria: *The learners are able to correctly clarify the minerals and explain the impact of mining on the sustainable development of different countries in the world.*				
Materials: *Geographical documents, maps, tactile and talking materials, atlases, journals, photographs, local environment, internet/Jaws software and samples of minerals.*				

Subject: GEOGRAPHY	Year: 2	Option: SOCIAL STUDIES EDUCATION
Topic Area: Human and Economic Geography	**Sub-topic Area:** Economic activities and development studies	
Unit 14 : Power and Energy Production in the world		**No. of periods: 7**
Key unit competency: The student-teacher should be able to evaluate the success of the sustainable development projects in the power and energy production in different parts of the world.		

Learning Objectives			Content	Learning Activities
Knowledge and Understanding	**Skills**	**Attitudes and Values**		
– Identify the major world's sources of energy. – Explain the factors affecting the power production. – Explain the importance of the power and energy in the world. – State the problems hindering the development of the power and energy and suggest the solutions.	– Carry out a research to find out the alternative environmental friendly power and energy sources. – Describe the factors affecting the power production in the world. – Evaluate the importance of the power and energy. – Explain the problems hindering the development of the power and energy and propose the possible solutions.	– Show concern for the low levels of power and energy production in the world and the desire to develop the alternative sources of the power and energy. – Appreciate the importance of the power and energy on the sustainable development of the world's economy. – Show respect for the efforts in the development of power and energy in the world.	– Sources and forms of energy used in the world (renewable and non-renewable energy sources). – Non-renewable energy sources: fossil fuels (coal, oil, natural gas), uranium (Nuclear energy), peat coal. – Renewable energy sources: wind energy, water solar energy. – Fuel woods: charcoal and fire wood. – Waste products (biogas). – Geothermal.	– Use the geographical documents, maps, photographs, internet, video clips or the local environment to identify the different sources of power and energy used in the world, the factors favouring the power production, the importance of power in the development and the problems hindering the development of the power and energy. Write down the findings. – In groups, discuss and compile the findings for a class presentation followed by Q&A. – In groups, discuss on the possible solutions to the problems hindering the development of power and energy and make a class presentation.

			– Factors favouring the power and energy production in in the world. – Importance of power in the development in the world. – Problems hindering the development of the power and energy and the possible solutions in the world.	– Our reliance on a decreasing stock of the fossil fuels is increasing, the demand for the energy is also increasing and the production of the renewable energy is increasing very slowly, how as a world do we manage this impending crises?
Links to other subjects: *It is linked to the power and energy in Physics.*				
Assessment criteria: *The learners are able to correctly evaluate the impact of the sustainable development projects on the power and energy industries of the world.*				
Materials: *Geographical documents, brailed textbooks, maps, atlases, tactile or talking materials, photographs, internet /Jaws software and local environment.*				

Subject: GEOGRAPHY	Year: 2	Option: SOCIAL STUDIES EDUCATION
Topic Area: Human and Economic Geography	**Sub-topic Area:** Economic activities and development studies	
Unit 15 : Industrialization in the world		**No. of periods: 7**

Key unit competency: The student-teacher should be able to evaluate the success of the sustainable development projects in the industry in different parts the world.

Learning Objectives			Content	Learning Activities
Knowledge and Understanding	**Skills**	**Attitudes and Values**		
– Identify different types of industries. – State the factors influencing the location and localisation of the industries. – Name the major industrial regions of the world. – Give the importance of the industrial development in the world.	– Classify different types of industries. – Evaluate the factors influencing the location and localisation of the industries. – Locate the major industrial regions of the world. – Evaluate the importance of the industrial development in the world.	– Appreciate the distribution of the industries and their impact on the sustainable development. – Show concern for the effects of industrialisation and the desire to protect the environment	– Definition and classification of the industries. – Factors influencing the location of the industries and the industrial development (localisation). – Major world industrial regions (developed countries e.g. Japan, USA, Russia and developing countries e.g. Egypt, South Africa, China, South Korea).	– In groups, discuss about the different industrial products and make classification of the industries. – Use the geographical documents, internet, maps, photographs or the local environment to research on the factors influencing the location of the industries and the industrial development, the major world industrial regions, the importance of the industrial development, the problems affecting and resulting from the industrial development, and write down the findings. – In groups, discuss and compile the findings to make a class presentation and engage in Q&A methodology. – Use documents, maps, internet and photographs to research about the industrialisation in the selected countries. – In groups, discuss the findings and write a report. – Is the strength of the industrialised western economies affecting the pace of change in the developing economies? In pairs, consider the above statement and write a report on your conclusions.

– Identify the problems affecting the industries and the effects of industrial development.	– Evaluate the problems affecting the industries and the effects of the industrial development in the world, and suggest the solutions.		– Importance of the industrial development. – Problems affecting the industrial development. – Problems resulting from the industrial development and the possible ways to mitigate them. – Case studies: o Developed countries: Japan. o Developing countries: South Korea.	
Links to other subjects: *It is linked to industrial revolution in History and industries and firms in Economics.*				
Assessment criteria: *The learners are able to evaluate the success of the sustainable development projects in the industry in different parts the world.*				
Materials: *Geographical documents, brailed textbooks, maps, atlases, tactile or talking materials, photographs, internet /Jaws software and local environment.*				

Subject: GEOGRAPHY	Year: 2	Option: SOCIAL STUDIES EDUCATION
Topic Area: Human and Economic Geography	**Sub-topic Area:** Economic activities and development studies	
Unit 16 : Transport and Communication in the world		**No. of periods: 5**
Key unit competency: The student-teacher should be able to analyse the impact of the transport and communication projects on the sustainable development of the different countries in the world.		

Learning Objectives			Content	Learning Activities
Knowledge and Understanding	**Skills**	**Attitudes and Values**		
– Give the meaning of transport and communication. – Identify the major types of transport. – Identify the factors influencing the development of the different types of transport. – Outline the advantages and disadvantages of the different types of transport. – Give the importance of transport. – State the different types of communication.	– Explain the meaning of the transport and communication. – Describe the major types of transport. – Explain the factors influencing the development of the different types of transport. – Explain the advantages and disadvantages of the different types of transport. – Evaluate the importance of transport.	– Appreciate the importance of the different types of transport. – Use the available resources like the inland waterways, airports, roads. to compare the transport in Rwanda with the other countries. – Appreciate the advantages and the disadvantages of all types of transport and communication.	Transport and Communication – Meaning of transport and Communication. Transport – Types of transport: (Human and animal portage, road, railway, pipeline, water and air transport). – Factors influencing the development of different types of transport. – Advantages and disadvantages of each type of transport.	– Use the geographical documents, internet, maps, photographs or the local environment to research on the different types of transport, the factors influencing the development of the transport, the advantages and the disadvantages of each type of transport, the importance of transport and the challenges facing the different types of transport. Record the findings. – In groups, discuss and compile the findings for a class presentation followed by Q&A. – Use the geographical documents, internet, maps and photographs to research on the transport on water, roads and railways in the selected countries – In groups, discuss and compile the findings and write a report.

– Give the importance of communication. – Identify the problems affecting the communication.	– Explain the different types of communication. – Evaluate the importance of communication. – Explain the problems affecting the communication and propose the solutions.	– Show concern for the challenges encountered in the transport and communication and the desire to improve the transport and communication means.	– Importance of transport to the development of the countries. – Problems/challenges affecting the different types of transport. – Case studies: o St. Lawrence sea way. Communication – Types and forms of communication: (satellites, television, radio, telephone, internet). – Importance of communication. – Problems affecting communication and the possible solutions.	– Is the continual reliance on the road and air transport in many countries increasing the emissions of greenhouse gases? In pairs, investigate this issue and suggest ways in a report. – Use the geographical documents, internet, maps and photographs or the local environment to research on the different types and the forms of communication, the importance of communication and the problems affecting the communication. – In groups, discuss and compile the findings for a class presentation.
Links to other subjects: *It is linked to Transport and Communication in Entrepreneurship, and Economics.*				
Assessment criteria: *The learners are able to analyse the impact of transport and communication projects on the sustainable development of the different countries in the world*				
Materials: *Geographical documents, brailed textbooks, maps, atlases, tactile or talking materials, photographs, internet /Jaws software and local environment.*				

Subject: GEOGRAPHY	Year: 2	Option: SOCIAL STUDIES EDUCATION
Topic Area: Human and Economic Geography	**Sub-topic Area:** Economic activities and development studies	
Unit 17 : Trade and Commerce in the world		**No. of periods: 5**

Key unit competency: The student-teacher should be able to evaluate the impact of trade and commerce on the sustainable development of different countries in the world.

Learning Objectives			Content	Learning Activities
Knowledge and Understanding	**Skills**	**Attitudes and Values**		
– Define trade and commerce. – Identify the different types of trade and commerce. – Outline the factors influencing the international trade. – Give the importance of the international trade. – State the major financial centres of the world. – Identify the major trading patterns and the world trading blocks. – State the problems affecting the international trade.	– Explain the meaning of trade and commerce. – Discuss the different types of trade and commerce. – Describe the factors influencing the trade and commerce. – Explain the advantages and disadvantages of the international trade. – Explain the financial centres of the world. – Describe the major trading patterns and the trading blocks of the world. – Explain the problems affecting the international trade and propose the solutions.	– Appreciate the importance of trade and commerce. – Show the continual desire to improve trade and commerce. – Appreciate the importance of the major financial centres and trading blocks. – Appreciate the importance of the regional integration.	– Meaning of Trade and – Commerce. – Types of trade (international and internal). – Factors influencing the international trade. – Causes of the low levels of international trade in LDC's. – Importance of the international trade in the development. – Major financial centres of the world (I.M.F, World Bank, etc.).	– Use internet, maps and a range of text books to research on the different types of trade and commerce, factors influencing trade and commerce, importance of international trade, major financial centres of the world, world trading blocks and the regional integration. – In groups, discuss and compile the findings for a class presentation followed by Q&A. – In groups, discuss the problems affecting the trade and commerce and propose the solutions. – What are the particular problems to the trade and commerce in the developed countries and the developing countries? How can these countries overcome their problems?

			– World trading blocs and the regional integration (definition, advantages and disadvantages). – Factors affecting the regional integration. – Problems affecting the international trade and the possible solutions. – Case studies on the trading blocks and the regional integration: EAC, ECOWAS, OPEC AND EU.	– In pairs, discuss these questions and write a report. – Use documents, maps, internet photographs to research about trade and commerce in the selected countries. – In groups, discuss the findings and write a report. – Many regional integration communities do not attain all of their objectives. What are the challenges encountered by the regional integration communities in the developed countries and the developing countries? – In pairs, investigate this issue and write a report on your conclusions.
Links to other subjects: *It is linked to the statistics and the frequency in Mathematics, and trade in Economics*				
Assessment criteria: *The learners are able to evaluate the impact of trade and commerce on the sustainable development*				
Materials: *Geographical documents, internet, photographs, maps, local environments, tactile and talking materials and journals*				

5.2. Geography syllabus units for year three

5.2.1. Key competences for end of year three

- Explain different physical geographical phenomena and their impact on the sustainable development in the world.
- Explain different problems associated with the physical, human and economic environment of the world and suggest solutions.
- Evaluate the major challenges related to the climate change in the world and suggest solutions.
- Interpret physical and human features on the maps and the photographs.

5.2.2. Syllabus units for year three

Subject: GEOGRAPHY	**Year:3**	**Option: SOCIAL STUDIES EDUCATION**
Topic Area: Practical Geography	**Sub-topic Area: Photographic interpretation**	
Unit 1: Interpretation of Photographs and video images		**No. of periods: 8**
Key unit competency: The student-teacher should be able to interpret photographs, video and images		

Learning Objectives			**Content**	**Learning Activities**
Knowledge and Understanding	**Skills**	**Attitudes and Values**		
- Define a photograph. - Identify different types of photographs. - Identify the physical and human aspects on a photograph and the video images. - State the sections of a photograph. - State the relationship between the physical and human aspects on photographs or video images.	- Analyse different types of photographs. - Differentiate among the types of photographs. - Interpret physical and human aspects on a photograph and video images. - Describe the different sections of a photograph. - Analyse the relationship between the physical and human aspects on the photographs or video images.	- Appreciate the importance of the photographs. - The relationship between the physical and human aspects. - Appreciate the relationship between the physical and human aspects on photographs or video images.	**Photographic Interpretation** - Definition of a photograph - Types of photographs (Ground and aerial). - Interpretation of the physical and human aspects on the photographs and video images. - Sections of a photograph (foreground, middle ground and background). - The relationship between the physical and human aspects on the photographs and video images	- Use photographs, geographical documents, diagrams and internet to research on the types of photographs, the sections of a photograph. - In groups, discuss the findings and determine the types of photograph, the sections of a photograph - Use photographs or video images to identify the physical and human aspects on the photographs and their inter-relationships. - In groups, discuss the findings and determine the different physical and human aspects on the photographs and video images.

Links to other subjects: *It is linked to drawings in Fine art.*

Assessment criteria: *The student-teachers are able to correctly interpret the physical and human aspects on the photographs and draw sketches by reduction or enlargement of the photographs.*

Materials: *Geographical documents, photographs, video images, cameras, internet, drawing equipment, magnifying lenses, GIS materials, local environment, tactile and talking materials.*

Subject: GEOGRAPHY	Year: 3	Option: SOCIAL STUDIES EDUCATION
Topic Area: Physical Geography	**Sub-topic Area:** Understanding the earth and universe	
Unit 2: The origin and distribution of the continents		**No. of periods : 9**

Key unit competency: The student- teachers should be able to discuss the theories of the origin and the distribution of the continents.

Learning Objectives			Content	Learning Activities
Knowledge and Understanding	**Skills**	**Attitudes and Values**		
– Name the theories of origin and distribution of the continents and ocean basins. – Outline the evidences of the continental drift. – State the major types of plate boundaries and tectonic plates. – Explain the effects of tectonics plate on the landscape.	– Describe the origin and distribution of the continents and ocean basins. – Apply the knowledge to explain the shapes and the current positions of the continents and ocean basins. – Justify the view that the continents really drifted. – Do research on the causes of the continental drift and the distribution of continents relative to one another. – Evaluate the effects of plate tectonism.	– Appreciate the origin and the distribution of the continents and ocean basins. – Show concern to the desire to understand the evidences of the distribution of the continents and ocean basins.	Continental drift – Theories of the origin and distribution of the continents and ocean basins (Wegner's theory) – Evidences of the continental drift. – Effects of the continental drift on the evolution of the physical features. – The concept of tectonics plate (types of tectonic plates, movements/ boundaries)	– Use the geographical documents, maps, photographs and internet to research on Wegner's theory of the origin of the continents and ocean basins, their distribution and evidences of continental drift – In groups, discuss and write down the findings for a class presentation. – In groups, discuss and compile the findings and make a class presentation supported by Q&A.

Links to other subjects: *It links to the forces of compression and tension in Physics.*

Assessment criteria: *The student-teachers are able to correctly explain the origin and distribution of the continents.*

Materials: *Geographical documents, maps, globe, journals, tactile and talking materials, atlases, photographs and internet/Jaws software.*

Subject: GEOGRAPHY	**Year:3**	**Option: SOCIAL STUDIES EDUCATION**
Topic Area: Physical Geography`	**Sub-topic Area:** Landform evolution and processes	
Unit 3 : External landform processes and related features		**No. of periods : 14**
Key unit competence: The student-teachers should be able to demonstrate an understanding of different features resulting from the external processes.		

Learning Objectives			**Content**	**Learning Activities**
Knowledge and Understanding	**Skills**	**Attitudes and Values**		
– Explain the external processes of weathering. – Identify the major factors influencing weathering. – Identify the different types of mass wasting in different areas, their causes and the effects.	– Recognise the different weathering processes. – Describe the factors affecting weathering – Evaluate the causes and the effects of mass wasting.	- Appreciate the importance of the landforms resulting from the weathering. - Show concern for the causes and the effects of mass wasting.	Landforms associated with external processes: – Weathering o Definition of weathering. o Types and processes of weathering. o Factors influencing weathering (climate, nature of rock, human activities, vegetation, relief, animals and duration/ time).	– Use documents, internet, video clips, maps, photographs or the local environment to identify different types and processes of weathering and the factors influencing weathering. – In groups, discuss the findings and make a class presentation. – Use the geographical documents, internet, maps, photographs and the local environment to research on the types of mass wasting, causes, its effects and the measures to control mass wasting. Write down the findings. – In groups, discuss and compile the findings for a class presentation.

			– Mass wasting: o definition o Causes of mass wasting, effects of mass wasting, measures to control mass wasting.	
Links to other subjects: *It is linked to the solubility/solvent action and chemical equations in Chemistry; force/pressure in Physics.*				
Assessment criteria: *The student-teachers are able to correctly differentiate among the weathering landforms and their relationships with the human activities; and evaluate the causes and the effects of mass wasting.*				
Materials: *Geographical documents, maps, photographs, journals, tactile and talking materials, local environment, charts, internet website and fieldwork materials.*				

Subject: GEOGRAPHY	Year: 3	Option: SOCIAL STUDIES EDUCATION
Topic Area: Physical Geography	**Sub-topic Area:** Landform evolution and processes	
Unit 4: Wave erosion and Deposition		**No. of periods: 22**

Key unit competency: The student-teachers should be able to categorise different features resulting from the wave action and their relationships with the human activities.

Learning Objectives			Content	Learning Activities
Knowledge and Understanding	**Skills**	**Attitudes and Values**		
– Identify the types of coasts. – Explain the process of wave erosion and deposition. – Identify the factors influencing the formation of the coastal landforms. – Name the major features associated with the wave erosion and depositional processes. – State the importance of the coast landforms created by the wave action. – State the different types of coasts resulting from changes in the sea level.	– Recognise the different landforms resulting from the wave erosion and depositional processes. – Relate the types of coasts and how they influence the human activities. – Explain the factors influencing the coastal landforms. – Evaluate the importance of the coastal landforms created by the wave action.	- Show the continual desire to understand the different types of coasts. - Appreciate the importance of the different landforms created by the wave erosion and the deposition.	**Coastal landforms** – Definition of key terms: coast, shore, waves, long shore drift. – Types of waves (plunging waves, spilling waves) – Factors determining the strength of the waves/energy of waves). – Wave action processes: erosion, transportation and deposition. – Factors influencing the formation of the coastal landform. – Landforms produced by the wave erosion. – Landforms produced by the wave deposition. – Importance of coast landforms produced by the wave action. – Types of coasts: o submerged coasts (rias, fiord, estuaries, deltas).	– Use a range of geographical documents, internet, maps, diagrams and photographs to research on the processes of wave erosion, wave deposition, factors influencing the formation of coastal landforms, landforms resulting from wave erosion and deposition and the importance of coastal landforms, and write down the findings. – In groups, discuss and compile the findings for the class presentation. – Use documents, internet, maps, diagrams and photographs to research on the types of coasts and coral reefs, formation of coral reefs, theories of the origin of coral reefs, factors influencing coral reefs and impact of coral reefs.

– Identify the major types of coral reefs.	– Differentiate the types of coasts resulting from the changes in the sea level. – Do research using the internet websites for the types of coral reefs.	- Appreciate the importance of the coastal landforms created by the wave action.	o Emerged coasts (cliffs, beaches, caves). - Coral reefs: o Nature, types and the formation of the coral reefs. o Conditions influencing the coral formation e.g. coral polyps, salt water. o Theories on the origin of the coral reefs (the subsidence theory, antecedence theory and the glaciated control theory). o Impact of coral reefs. o Problems facing the development and the growth of coral reefs. - Types of sea level changes (emergence submergence). - Causes of the sea level changes. - Features resulting from the sea level changes: raised beaches, wave cut platform, raised cliffs. - Effects of the sea level changes.	– In groups, discuss and compile the findings for the class presentation. – Use documents, internet, maps, diagrams and photographs to research on the sea level changes, types, causes, associated features, evidences, effects and write down the findings. – In groups, discuss and compile the findings for a class presentation and draw conclusions. - Is tourism having a deleterious effect on the coral reefs around the world? Should we prevent humans from visiting these reefs? Comment on the reliability of these statements.
Links to other subjects: *It is Linked to oscillations, gravitational force and power in Physics.*				
Assessment criteria: *The* student-teachers *are able to correctly differentiate the features resulting from the wave action and their relationship with the human activities.*				
Materials: *Geographical documents, maps, atlas, journals, photographs, diagrams, talking and tactile materials, local environment, charts and internet.*				

SUBJECT: Geography	Year 3	Option: Social studies Education
Topic Area: Physical Geography	**Sub-topic Area:** Rocks	
Unit 5: Rocks and Minerals		**No. of periods : 14**
Key unit competency: The student-teachers should be able to compare different types of rocks and minerals and evaluate their importance.		

Learning Objectives			Content	Learning Activities
Knowledge and Understanding	**Skills**	**Attitudes and Values**		
– Identify the various types of rocks in the world and their characteristics. – Identify different components of the rocks. – State the economic importance of the rocks. – Identify the various types of minerals in the world. – Identify the physical and the chemical properties of the minerals.	– Classify the different types of rocks and their characteristics. – Explain the various components of the rocks. – Evaluate the economic importance of the rocks. – Explain the physical and the chemical properties of the rocks. – Apply the knowledge to categorise and identify the different types of minerals. – Explain the physical and the chemical properties of the minerals. – Evaluate their importance	– Appreciate different types of rocks and minerals found in Rwanda. – Appreciate the importance of rocks and minerals in Rwanda.	– Rocks: definition, types and their characteristics. – Rock composition. – Physical and chemical properties of the rocks. – Impact of the rocks (advantages and disadvantages) on the landscape and on the man. – Minerals: types and properties of minerals;	– In field study, observe different types of rocks and write down the findings. – In groups, discuss the findings and make a class presentation. – Use the geographical documents and internet to research on the classification and characteristics of rocks in Rwanda. – Write down the findings. – in groups, discuss and present the findings on the rocks – Using internet and textbooks, do research on types and properties of minerals, the importance of rocks and minerals. – Record the findings. – In groups, discuss the findings and make a class presentation followed by Q&A.

Links to other subjects: *It is linked to chemical properties in Chemistry.*

Assessment criteria: *The student-teachers are able to correctly classify different rocks in Rwanda and evaluate their economic importance.*

Materials: *Text books/ brailed textbooks, maps , atlases, tactile and talking materials, photographs, internet/Jaws software, local environment, rock and mineral samples.*

Subject: Geography	Year: 3	Option: Social studies Education
Topic Area: Physical Geography	**Sub-topic Area:** Soils	
Unit 6 : Classification of Soils and Soil formation		**No. of periods: 13**
Key unit competency: The Student-teachers should be able to explain the classification and factors responsible for the formation of the soil		

Learning Objectives			Content	Learning Activities
Knowledge and Understanding	**Skills**	**Attitudes and Values**		
– Differentiate between the zonal, azonal and inter-zonal soils. – List the factors responsible for the soil formation. – Identify the processes of the soil formation. – Outline the causes and the effects of the soil erosion. – Outline the appropriate soil conservation measures in the world.	– Classify the major types of soil in the world. – Explain the factors favouring the formation of the soils. – Describe the processes of the soil formation. – Explain the causes and the effects of the soil erosion in the world. – Evaluate the appropriate soil conservation measures in the world.	– Appreciate the distribution of the major soil types in the world. – Show respect for the soil conservation measures in the world.	– Classification of the major types of soil in the world – Factors favouring the formation of the soils. – Processes of the soil formation – Soil erosion: causes and the effects. – Appropriate soil management and the conservation measures. – Economic importance of the soil.	– Use internet, a range of text books, maps of soils and the photographs to research on the classification and factors favouring the formation of the soils. In groups, discuss and compile the findings for a class presentation. – Use internet, a range of text books, maps, photographs and the local environment to research on the causes, the effects of soil erosion, and the measures for soil conservation. – In groups, discuss and compile the findings for a class presentation and draw the relevant conclusions.

Links to other subjects: *This topic is linked to Pedology in Biology.*

Assessment criteria: *The student-teachers are able to correctly explain the factors and the processes responsible for the formation of soil.*

Materials: *Geographical documents, maps, atlases, journals, tactile or talking materials, photographs, local environment, internet /Jaws software and local environment.*

Subject: Geography	Year: 3	Option: Social studies Education
Topic Area: Physical Geography	**Sub-topic Area:** Weather and climate	
Unit 7: Climate Change		**No. of periods: 18**
Key unit Competency: The student-teachers should be able to discuss the climate change and its impact on Rwanda and the other countries.		

Learning Objectives			Content	Learning Activities
Knowledge and Understanding	**Skills**	**Attitudes and Values**		
– Define the concept of climate change. – State the causes of climate change. – Identify the effects of climate change. – Locate the areas most affected by the climate change in the world. – Identify the causes and the effects of global warming and green house. . – Outline the measures of the climate adaptation and mitigation.	– Explain the causes of climate change. – Evaluate the effects of climate change. – Explain the causes and the effects of global warming and green house. – Examine the ways of adaptation and mitigation to climate change. – Examine the causes and the effects of desertification.	– Appreciate the importance of adaptation and mitigation on climate change. – Show concern for the man's contribution towards the climate degradation. – Show concern for the impact of climate change. – Show concern for the impact of global warming and green house effects.	Climatic change – Definition of climate change. – Causes of climate change. – Effects of climate change in the world (global, Africa, Rwanda). – Global warming and the green house phenomena (definition, causes and the effects). – Adaptation measures for the climate change. – Measures for mitigating the climate change.	– Do research the concept of the atmosphere, using geographical documents and internet. Record the findings. – In groups, discuss the findings and make a class presentation. – Make a class presentation followed by Q&A. – In groups, discuss the findings and make a class presentation on the structure of the atmosphere. – In groups, use internet and geographical documents to research on types and factors – In groups, discuss the factors influencing climate and compile the above findings and make a class presentation followed by Q&A.

– Identify the causes and the effects of desertification.			– Desertification (definition, causes, effects).	– In pairs, investigate the impact weather and climate on man's activities and record your findings in a report.
Links to other subjects: *It links to Meteorology, measurement and recording in Physics and Mathematics.*				
Assessment criteria: *The student- teachers are able to interpret the atmospheric phenomena and investigate the impact of the weather and climate on the environment and on the human activities.*				
Materials: *Documents, internet, maps, local environment, instruments (thermometer, rain gauge, barometer), atlas, journals, tactile and talking materials, diagrams and photographs.*				

Subject: Geography	**Year: 3**	**Option: Social studies Education**
Topic Area: Physical Geography	**Sub-topic Area:** Drainage	
Unit 8: Global Drainage Systems		**No. of periods: 22**
Key unit competency: The student-teachers should be able to investigate the economic importance of the global drainage systems and the reasons for their conservation.		

Learning Objectives			**Content**	**Learning Activities**
Knowledge and Understanding	**Skills**	**Attitudes and Values**		
– Identify the different drainage patterns of the world. – Outline the characteristics of a river profile. – Identify the landforms resulting from the work of a river. – Explain river capture and river rejuvenation. – Identify the importance of a river. – State different types of lakes.	– Explain the different drainage patterns in the environment. – Examine the characteristics of a river profile. – Describe the landforms resulting from the work of a river. – Differentiate between the river capture and river rejuvenation. – Evaluate the importance of the rivers.	– Appreciate the importance of the global drainage. – Appreciate the classification of the drainage patterns. – Appreciate the distribution of the global water bodies in the world. – Show concern for the causes and the effects of the ocean currents and the tides. – Show continual desire to protect the water bodies (wet lands) for the conservation of the environment.	**Rivers** – Definition of a river and the associated terms (discharge, velocity, watershed/divide, catchment area, river basin). – Types of rivers. – River system (the work of a river/triple function of a river) – The river profile and its characteristics (youthful, mature and lower stages of a river). – Formation of the landforms in its youthful stage (waterfalls, rapids). – Formation of the landforms in its mature stage (meanders).	– Use geographical documents, maps, photographs and internet or the local environment to research on the river profile and its associated landforms. – In groups, discuss the findings for a class presentation. – In groups, discuss the impact of the rivers and make a class presentation. Also engage in an interactive Q&A methodology. – Use textbooks, diagrams, photographs and internet to research about the landforms resulting from the river capture and river rejuvenation. – In groups, discuss and compile the findings for a class presentation. – Use the geographical documents and a drainage map of the world to find the major lakes and their mode of formation, the impact of lakes and the distribution of seas and oceans

– Identify the importance of the lakes. – State the different seas and oceans of the world.	– Explain the mode of formation for the different types of lakes and their importance. – Describe the distribution of the oceans, seas		– Formation of the landforms in its lower/ old stage (developed meanders, ox-bow lakes, flood plains, braided channels, deltas, estuaries, levees). – River capture and river rejuvenation (definitions, causes and the effects). – Superimposed and antecedent drainage. – Impact of rivers. **Lakes** - Types of lakes (tectonic, erosional, depositional, man-made). - Mode of formation of the lakes. - Impact of the lakes. **Seas and oceans** - Distribution of seas and oceans	– In groups, discuss and compile the findings for a class presentation and draw the relevant conclusions. – In groups, discuss the importance of the global water bodies for a class presentation supported by Q&A.
Links to other subjects: I*t links to the solution and salinity in Chemistry; velocity, volume and depth, oscillation in Physics.*				
Assessment criteria: *The student-teachers are able to investigate the economic importance of the global drainage systems and the reasons for their conservation.*				
Materials: *Documents, brailed textbooks, maps, atlases, tactile or talking materials, photographs, internet /Jaws software and local* environment.				

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7. ANNEXES

7.1. TTC subjects and time allocation

SN	Subject	Number of Periods								Number of Syllabi
		ECLPE		SSE		SME		LE		
		Y1	Y2&3	Y1	Y2&3	Y1	Y2&3	Y1	Y2&3	
1	Foundations of Education	6	6	6	5	6	5	6	5	1
2	English	5	5	5	4	5	4	7	7	3
3	Kinyarwanda	5	5	2	2	2	2	5	6	3
4	Mathematics	3	3	3	3	6	6	2	2	3
5	Integrated Science	4	4	1	1	11	0	1	1	2
6	Physics	0	0	0	0	0	5	0	0	1
7	Biology	0	0	0	0	0	5	0	0	1
8	Chemistry	0	0	0	0	0	5	0	0	1
9	Social Studies	4	4	11	0	2	2	2	2	3
10	History	0	0	0	5	0	0	0	0	1
11	Geography	0	0	0	5	0	0	0	0	1
12	Economics	0	0	0	5	0	0	0	0	1
13	Creative Performance (Music and Fine Arts)	4	4	4	4	2	2	4	4	2
14	Physical Education	1	1	2	1	1	1	1	1	1
15	Entrepreneurship	2	2	2	2	2	2	2	2	1
16	ICT	2	2	2	2	2	2	2	2	1
17	TMP	7	7	4	4	6	4	4	4	11

18	SNE	2	2	2	2	2	2	2	2	1
19	Religious Education	1	1	4	3	1	1	1	1	2
20	French	4	4	2	2	2	2	7	7	3
21	Kiswahili	1	1	1	1	1	1	5	5	2
22	Co-Curricular	1	1	1	1	1	1	1	1	0
23	Individual Study	8	8	8	8	8	8	8	8	0
24	School Attachment	**Year 3 (First term)**								
	TOTAL	60	60	60	60	60	60	60	60	47

7.2. Geography overviews for TTC

TOPIC AREAS	SUBTOPIC AREAS	COMPETENCIES		
		Year 1 (Geography in Social Studies)	**Year 2**	**Year 3**
Practical geography	**Statistics**	…….....	Interpret statistical data. Construct statistical graphs, diagrams and maps.	…….....
	Map work interpretation	…….....	Calculate distances and areas on a map. Analyse the relationship between physical aspects and human activities on maps.	…….....
	Photographic Interpretation	…….....	To explain the relationship between the physical aspects and human activities on maps.	To interpret physical aspects and human activities on photographs, video and images
Physical Geography	**Understanding the earth and universe**	…….....	Distinguish between the components of the universe and the Solar system. Discuss the theories for origin of the earth and the effects of its movements.	Discuss the theories for origin and distribution of the continents.
	Landform evolution and processes	Analyze the formation of major relief regions of Rwanda and their effects on human activities.	Describe the Internal processes responsible for the evolution of different relief landforms and associated features.	Describe the external processes responsible for the evolution of different relief landforms and associated features. Categorize different features resulting from wave action and their relationships with human activities.

	Rocks and minerals	Compare different types of rocks of Rwanda and their importance.	…….....	Assess the economic importance of rocks and minerals.
	Soils	Compare different types of soils of Rwanda and their importance.	Analyze different constituents and morphological properties of soil.	Explain the processes for the formation of soil, the causes and effects of soil erosion and soil conservation measures.
	Weather and Climate	Analyze the climate and seasons of Rwanda and their impact on human activities.	Appreciate the importance of the atmosphere, weather and the impact of climate on the environment and human activities in the world.	Discuss the climate change and its impact on Rwanda and other countries.
	Vegetation	Appreciate the importance of different vegetation types and their conservation in Rwanda.	Appreciate the distribution of different vegetation types in the world.	…….....
	Drainage	Analyze the drainage system of Rwanda and its relationships with human activities.	…….....	Analyze the economic importance of the global drainage system and the reason for its conservation
Human and Economic Geography	**Population**	Discuss peculiar demographic problems in Rwanda and their solutions	Discuss the problems of population growth and ways of controlling population growth in the world.	…….....
	Settlement and Urbanization	Assess the impact of rural and urban settlements on sustainable development of Rwanda.	Discuss the impact of settlement and urbanization on sustainable development of different countries.	…….....

	Economic activities	Analyze the impact of various socio-economic activities on sustainable development of Rwanda (Agriculture, Forestry, Fishing, Mining, Power and Energy, Industrialization, Transport, communication and trade, Environmental conservation and tourism).	Analyze the impact of the socio-economic activities on sustainable development of different countries in the world. (Agriculture, Mining, Power and Energy Production, Industrialization, Transport and Communication, Trade and Commerce).	……..