[SYLLABUS FORMS I, II & III]

This document is based on the National Curriculum Framework- Secondary

Table of Content

1 English Language

Introduction

The lower secondary English curriculum aims at further developing fluency in and an appreciation of the language as well as an understanding of its use for personal, social, academic and professional functions. The emphasis is on the use of English as a tool for communication. The aim is to teach students to communicate effectively, both orally and in writing, and to use language purposefully in a variety of contexts. Students will be equipped with adequate understanding, knowledge and skills to meet different language needs through a holistic and comprehensive approach.

The aims of English at lower secondary are to:

- Develop students' ability to listen for effective communication in a range of contexts and for different purposes

- Develop students' ability to speak fluently and confidently in a range of formal and informal situations, and on a variety of topics; to make them use appropriate pronunciation, intonation, vocabulary and grammatically correct utterances

- Enable students to read different genres for various purposes, to respond to texts and to identify, retrieve, and synthesize information from a number of sources

- Engage students in the production of a range of written texts, using appropriate conventions, forms and styles and with the attention to accuracy, purpose and audience

Assessment objectives

English will be evaluated through a number of assessment tools in line with the lesson objectives. Examples of assessment tools to be used are observation, oral presentations, questioning, True-False, multiple choice items, fill in the blanks, cloze texts, text production and project work.

Students should be able to:

- listen with literal and critical comprehension to a variety of speakers, in a variety of contexts and for different purposes
- speak fluently on a number of topics, in a wide range of contexts and to different audiences
- produce grammatically correct utterances
- read a wide range of texts with purpose, understanding, critical awareness and appreciation
- communicate clearly, correctly and appropriately in relation to purpose and audience
- write using accurate spelling, punctuation and grammar

Curriculum content

Form 1: Year 1

Listening

- Students listen to short and simple texts on familiar topics or topics of interest with understanding.
- They grasp and recall the main ideas and important details.
- They use a few strategies to make up for gaps in comprehension, e.g., use of prior knowledge and contextual clues.
- They can recognize the mood of the speaker through his/her tone, e.g., angry, happy.

Speaking

- Students express themselves on topics of interest in simple terms and structures.
- They engage in brief conversations on familiar topics with relative fluency, with at least one participant.
- The use of vocabulary is, most of the times, appropriate.
- Their articulation and pronunciation is generally correct. There is an attempt to vary tone and pitch according to purpose and audience.

Reading

- Students read and understand narrative texts and texts they are familiar with, such as greeting cards, recipes, letters, posters, simple poems and advertisements.
- They develop growing familiarity with other genres, e.g., newspaper articles and diary entries, and grasp the gist of these texts.
- They vary the pace according to text and content.
- There is an attempt to express their views on and relate to the text using simple language.
- They can draw simple inferences and link ideas in the text with their personal experience.
- Students read aloud simple texts, which may include some dialogue, with appropriate pronunciation, intonation, pitch and pace.

Writing

- Students produce short narrative and other texts they are familiar with, e.g., greeting cards and informal letters.
- They adopt the process approach when engaged in a written task.
- They write grammatically correct sentences, and attempt to use a variety of structures.
- They can take down notes from oral or written sources, and reproduce information in simple graphic form, e.g., a mind map.
- They write for different purposes and audiences in situations directly related to personal experience, e.g., letter writing, using appropriate conventions and correct grammar, spelling and punctuation.
- Their writing is generally coherent and includes adequate and relevant information obtained from different sources, e.g. internet, encyclopedia.
- They write legibly and present their work neatly.

Grammar

- Articles
- Determiners
- Punctuation
- Conjunctions
- Prepositions
- Simple tense
- Perfect tense
- Progressive tense
- Subject-verb agreement
- Nouns
- Adjectives

- Adverbs of place
- Adverbs of manner
- Adverbs of frequency
- Adverbs of place
- Active/passive Voice
- Direct/Reported Speech
- Phrasal verbs
- Antonyms
- Homonyms
- Prefixes/Suffixes

*Note: Grammar points have to be taught according to needs of students. The teaching of grammar should be contextualized and integrated in the teaching of all the language skills.

Listening

- Students listen with comprehension and recall the gist as well as important details with more confidence.
- They can process longer messages containing more unfamiliar words.
- They relate information form the text to prior knowledge or personal experience.
- They demonstrate awareness of speaker bias, emotions and tones such as surprise, sarcasm.

Speaking

- Students speak with more ease and on a wider range of topics.
- They engage in and sustain conversations/discussions with more than one participant, with appropriate responses and turn taking.
- There is an attempt to use sentences with varied structures and more precise vocabulary.
- Their variation of pitch, pace and tone according to audience and purpose is more prominent.
- Their nonverbal behaviour supports the spoken message.

Reading

- Students read a wide range of genres with relative fluency.
- They adopt different strategies with more confidence to derive meaning from the text and to read with understanding.
- They use word attack skills to guess the meaning of unknown words.
- They make predictions and draw inferences with more ease.
- They link ideas in the text with prior knowledge and personal experience more extensively.
- They also make intra-textual comparisons between two texts.
- Their critical outlook is sharper.
- They recognize the writer's perspective and express their agreement or disagreement thereof in simple language.
- They provide support for their views.
- Students read aloud longer texts which include dialogue with correct pronunciation and increasing fluency.
- They vary pace, tone, pitch and stress as required.

Writing

- Students' ability to write narrative and non-narrative texts is reinforced and extended.
- The genres they produce vary from diary entries to simple summaries, brief reports, etc.
- A variety of structures are used and discourse is suited to the purpose and reader(s).
- The students' writing is relevant and generally coherent, with adequate development of ideas where required.
- Relevant information is selected from different sources e.g., magazines, internet and the news.
- It is paraphrased, summarized or synthesized as required.
- Students write using correct grammar, spelling and punctuation.
- They use ICT as a tool for spell checks and formatting.
- They write legibly and present their work neatly.

Grammar

Students should use the following with increasing ease and confidence in spoken and written work:

- Articles
- Determiners
- Punctuation
- Conjunctions
- Prepositions
- Verbs (Simple, Perfect tense, Progressive tenses)
- Nouns
- Pronouns (personal, possessive, relative)
- Subject-Verb agreement
- Adjectives
- Adverbs (place, manner, frequency, place, degree)
- Active/Passive Voice
- Direct/Reported Speech
- Phrasal Verbs
- Antonyms
- Homonyms
- Hyponyms
- Prefixes/Suffixes
- Idioms

*Note: Grammar points have to be taught according to needs of students. The teaching of grammar should be contextualized and integrated in the teaching of all the language skills.

Form III: Year 3

Listening

- Students can listen more extensively to a wider range of speakers and different topics.
- They are able to grasp and recall a greater amount of information.
- They draw valid inferences from the message and their critical response is more obvious.
- They can differentiate between facts and personal opinion.
- They are able to relate and compare information from different sources on the same issue.

Speaking

- Students converse or discuss with more ease and confidence with one or more participants.
- They can elaborate and express their views on a variety of topics.
- They can also justify their stand with relevant arguments.
- Their vocabulary has expanded and sentence structures are varied.
- They use conventions according to the audience, context and purpose.
- They can talk with effect, e.g., arouse interest or curiosity.

Reading

- Students demonstrate increased literal and critical understanding.
- They read a wide range of texts on different topics and with different organizational patterns.
- They relate information from different parts of the same text or different texts and analyse these.
- They understand that writings reflect certain ideologies and cultural constructs.
- They thus recognize the writer's purpose and understand the reason behind the use of certain stylistic devices, e.g., irony and metaphorical language.
- They provide personal response to the text, demonstrate emphatic skills, and justify/discuss their views.
- Students read aloud texts of varying lengths, and including dialogue fluently and with conviction.
- They display confidence and vary pace, tone, pitch and stress as required.

Writing

- Students reinforce their ability to produce different genres.
- They select and include ideas or information in a coherent manner and
- They use some stylistic devices to write for effect, e.g., create suspense.
- Their work displays originality and relevance.

- The lay-out varies according to the genre and conventions used are appropriate.
- Students display critical thinking skills by presenting arguments with adequate support or justification when required.
- Students write using correct grammar, spelling and punctuation.
- They use ICT as a tool for spell checks and formatting.
- They write legibly and present their work neatly.

Grammar

- Prepositions
- Nouns
- Adjectives
- Adverbs (place, time, frequency, manner, degree)
- Phrases
- Clauses
- Verbs (simple, perfect, progressive tenses)
- Present participle
- Past participle
- Gerunds
- Transitive/Intransitive verbs
- Pronouns (personal, relative, possessive, demonstrative)
- Conjunctions
- Sentences (simple, compound, complex)
- Sentence functions (declarative, interrogative, exclamatory)
- Active/Passive Voice
- Direct/Reported Speech
- Prefixes/Suffixes
- Simile
- Metaphor
- Idioms

*Note: Grammar points have to be taught according to needs of students. The teaching of grammar should be contextualized and integrated in the teaching of all the language skills.

Additional notes to Educators
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Language is primarily a means of communication. The teaching of English should therefore be learner-centered and provide opportunities for the active participation of students. Lessons should be planned so as to allow the development of all the four skills. The teaching of grammar and vocabulary should be contextualized in order to make learning meaningful.

The use of communicative strategies will ensure that students develop their oral skills thereby building a strong foundation for written work as well as reading comprehension. To increase motivation and participation, it is advisable to use a variety of tasks and resources and also to tackle topics of interest to students. Since English language is quite prominent in our environment, the teacher can make use of informal situations o teach language. Television programmes, songs, events in the media, etc can be used as the basis of an English lesson. Thus teaching is linked to the life of the students. Moreover, the functional aspect of language must not ne eclipsed. Language has to be taught with reference to its uses in society. Enacting situations and dealing with texts like letters, posters, and bills, for instance, bring to the fore the real purpose of learning English.

To make language learning successful, it is also important to develop an appreciation for the language. This can be achieved through the study of literary texts or extracts and by encouraging readers to interact and respond to these. Literature must be seen as an additional source of exposure to English and the opportunity to engage students in the active study of varied uses of the language.

The use of ICT and audio-visual materials is strongly advisable. These are means of exposing students to authentic uses of the language and to a variety of speakers. They also bring about variety in the teaching of English. Language teachers must make optimal use of current teaching trends and the students will undoubtedly find the use of these resources appealing.

Below are examples of texts and activities that can be used for the teaching of the four skills. These can be used at any level, provided they are graded accordingly.

Listening
Examples of texts: short stories, poems, songs, conversations, instructions, extracts from plays, comprehension passages, songs. *Note: listening time should not exceed 2-3 minutes at a stretch. **Examples of activities:** mind maps, predicting, agree or disagree, list characteristics/qualities/ features, sequencing, match speech to visuals, fill in the blanks, listen and continue the story, guess the meaning of unknown words from context, detect mood in the text, multiple choice items, answering questions, note-taking, creating visuals/drawings to represent aspects of the text, listening and acting, comparing and contrasting to one's experience and to another text, analyzing speaker's mood/intentions.

Speaking
Examples of activities: empathic tasks, providing information (e.g. about oneself, one's hobbies), role play with contextualized speaking situations (e.g. answering a phone call, at a travel agency, transactions at the bank, ordering food at a restaurant, giving directions), formulating

greetings/requests/invitations/offers, giving advice/suggestions, discussions, debates (e.g. protection of the environment), delivering a speech, hot seating, formulating/adapting speech to different audiences, conversations, tongue twisters, minimal pair activities, narrative and descriptive talk, empathic tasks, picture-based discussions, summarizing information, word games.

Reading

Example of texts:

Posters, letters, cards, recipes, passages, extracts from stories, newspaper/magazine articles, song lyrics, advertisements, leaflets, speeches, instruction manuals.

Example of activities:

Brainstorming, predicting/anticipating, discussion, sharing views (characters, themes, events), identifying and categorizing specific information, reader's theatre, word building activities, literature circles, SQSR (Read Question, Read, Recite, Review), rewrite ending, rewrite from another perspective, jigsaw reading, hot seating, author's chair, Think Pair Share, summarizing.

Writing

Examples of writing tasks for Form I:

Descriptive essay (e.g. chocolate, lunch break, childhood memories)

Narrative essay (e.g. sports day, wedding)

Empathic essays (e.g. Imagine you are a pen/tree/bird…)

Informal letter (e.g. to cousin abroad, to friend)

Functional text (e.g. greeting card, shopping list, message, poster)

Creative text (e.g. poem, song, short story)

*Note: essays should be 150-200 words in length

Examples of writing tasks for Form II:
Narrative essay (e.g. encounter with an alien, a day in heaven)

Descriptive essay (e.g: food court, inter college football match)

Empathic essay (e.g. Imagine you are the Prime Minister for a day…)

Informal letter (e.g. to relative, to pen friend)

Creative text (e.g. poems, songs, short stories)

Functional texts (e.g. brochures, class newspaper/magazine)

*Note: essays should be 200-250 words in length

Examples of writing tasks for Form III

Narrative essay (e.g. trip with friends)

Descriptive essay (e.g. a person I admire)

Creative text (e.g. poem, song, short story, script writing)

Formal letter (e.g. application letter, complaint letter)

Functional text (e.g. newspaper advertisement)

Email (Informal/ Formal)

Introduction to Argumentative essay (e.g. mobile phones, fashion trends, Face book)

*Note: Essays should be approximately 250-300 words in length

Examples of activities:
Brainstorming, class/group discussion, guided research work, mind mapping
role play, jumbled activities at paragraph level, text analysis, parallel writing, free writing, story completion, Read Around Groups (for peer feedback), sharing and reacting to others' writing.

Additional hints on assessment in English

The assessment of the students' work is a mean of getting essential information on their performance. Constantly evaluating students allows the teacher to keep track of the progress and to diagnose errors. The teacher's intervention is thus timely and remedial action is taken when required. By focusing on the formative aspect of assessment, the teacher ensures that teaching is taking place at the appropriate pace and that some students are not lagging behind.

Some ways of assessing students are as follows:

1. **Observation:**

This allows the teacher to constantly assess students without their being aware of it. Through observation, the teacher can derive information on students' oral fluency, motivation, quality of written work, etc. Since this is an informal way of evaluating students, the latter are not under stress and the teacher is likely to get a real indication of what they can achieve. Generally, observation does not require much preparation. It can be carried out everyday and it is not time consuming. However, if the teacher wants to focus on specific aspects of performance such as pronunciation and intonation then it would be appropriate to use a checklist, grid or schedule so that information can be entered during observation.

2. **Oral presentation:**

Oral presentations are an effective means of assessing the students' command of oral English. The focus will be on pronunciation, intonation, pace, stress, grammar, vocabulary etc. Oral presentations can be based on a variety of topics. They can be follow up for project work conducted by students.

3. Role play:

Through role play, students can be asked to enact a range of characters in different situations. The advantage of this mode of assessment is that, in addition to elements of oral production assessed through oral presentations, role play enables the teacher to judge appropriateness of language used in relation to audience, context and purpose. Thus, through role play, students are assessed in situations closely linked to real life.

4. Questions

Questioning is a well known frequently used means of assessing students' knowledge and understanding. It can be either spoken or written and can be used to test the understanding of grammatical concepts, reading comprehension or conventions of spoken and written English. Questioning can be carried out formally or informally at frequent intervals during a lesson to check students' understanding before proceeding further. It can assess both lower and higher order thinking.

5. True-False

True-False items constitute a series of statements which the students have to agree or disagree with. The fact that students have to provide adequate justification for their answers ensures that such items promote critical thinking instead of the mere information retrieval.

6. Multiple choice

Multiple choice items are commonly used to assess reading comprehension, vocabulary and grammar. Students generally have to choose the correct answer from the three or four options provided. With the inclusion of carefully chosen distracters, multiple choice items can test higher order thinking.

7. Fill in the blanks

Fill in the blanks exercises can focus on specific grammar elements, vocabulary and reading comprehension. They are quite easy to prepare and practical to implement.

8. Cloze texts

Cloze texts can be used to test grammar and vocabulary. However, they are more challenging than fill in the blanks exercises as the grammar items are varied (e.g. syntax, agreement, tense). While completing these, the students must ensure that there is coherence, cohesion and relevance.

9. Text production

The writing of texts of various genres is quite challenging and enables the teacher to assess how far the students can pull together the various competencies for writing. Through written tasks, the teacher can assess grammar, syntax, vocabulary, originality, organization, use of stylistic features, critical thinking, appreciation etc.

10. Project work:

This is quite an extensive piece of work that can be carried out individually or through pair or group work. Through project work, the teacher can assess language skills by linking English to other subjects in the curriculum and tackling a number of topics. Along with language, research skills such as identification, selection, presentation of relevant information, critical thinking can also be assessed.

11. Portfolio

The portfolio is an effective tool for assessment as it constitutes a collection of students' works produced over a period of time. Since it allows the teacher to compare previous assignments with latest ones, the portfolio provides an insight into the progression of individual students. It

can also make students more autonomous as they can themselves evaluate how far and at what pace they are achieving set targets. Examples of works that can be included in a portfolio are: projects, research work, creative writing and informal writing.

2 French Language

Pourquoi apprendre le français ?

Le français est **une langue dynamique pratiquée quotidiennement** dans bon nombre de situations à Maurice. Il est aussi très présent dans la région, où il a une longue histoire. Son apprentissage prépare de ce fait nos jeunes à participer à la vie publique mauricienne, largement francophone, et à celle de la région.

Le français compte aussi parmi **les langues vivantes internationales**, la maîtrise desquelles est un incontournable dans le portfolio de compétences attendu d'un jeune aujourd'hui. En effet, la mondialisation de la société fait du développement **d'un multilinguisme fonctionnel** un atout actuellement indispensable pour une insertion sociale et professionnelle valorisante. Il convient aussi de garder en vue que la nouvelle culture juvénile, fortement ancrée par les nouvelles technologies et les medias dans les réseaux planétaires d'échanges, nécessite la maîtrise de langues transfrontalières en tant qu'outils de socialisation.

Par ailleurs, dans notre curriculum, le français joue avec l'anglais le rôle **d'outils langagiers pour le développement du potentiel cognitif** de l'individu, notamment de ses capacités de raisonnement par la pensée verbale. Il instrumentalise aussi de manière centrale la compétence de lecture-écriture pour des besoins à la fois fonctionnels et plus proprement académiques. La lutte contre l'illettrisme se gagne donc définitivement durant les années de collège.

En tant que langue et de ce fait, medium ou véhicule de contenu, le français permet en outre **un accès alternatif aux domaines de connaissances** abordés au collège, une plus-value qui peut beaucoup pour la qualité et la durabilité des connaissances développées.

Enfin, le français est **l'une des grandes langues du patrimoine mondial s'agissant de la littérature**. Son apprentissage permet donc un accès direct privilégié à la pensée et à l'œuvre d'auteurs de langue française, dont des auteurs de chez nous.

Les objectifs de l'enseignement du français durant les trois premières années du collège sont de

- Développer un rapport positif avec l'apprentissage du français dans le cadre de la construction d'une multilingualité fonctionnelle
- Développer à un niveau appréciable et de façon durable les compétences de base de la communication verbale orale et de la lecture-écriture

- S'exprimer à l'oral comme à l'écrit avec une aisance grandissante, correctement et clairement, et en ayant recours à un large répertoire de structures caractérisées par une certaine complexité, dans une diversité de situations
- Développer la capacité d'observation, d'analyse et d'argumentation en utilisant le français comme outil langagier pour ce faire
- Développer la créativité langagière et l'imagination de nos collégiens
- Développer une compréhension des structures et du fonctionnement de la langue (cf. grammaire, syntaxe, vocabulaire et orthographe)
- Développer le goût de la lecture en français.

Note : Ce programme est énoncé pour un moyen terme. Au fur et à mesure que la situation se sera redressée dès le primaire s'agissant du développement de compétences communicatives et langagières orales en français, une révision des programmes pour la FI sera entreprise.

Domaine : Maîtriser le système :

Il serait intéressant de considérer organiser la répartition du nombre d'heures / de classes consacrées aux différents domaines du programme de français sur une quinzaine. Du coup, sur 10 classes, 3 pourraient être consacrées à la maîtrise du système de la langue, soit environ 35-40 classes en une année.

Pour les trois premières années du secondaire, en matière de grammaire, l'un des principaux objectifs sera que l'apprenant soit capable de démontrer sa maîtrise des structures fondamentales de la phrase simple et de la phrase complexe relative et conjonctive dans ses manifestations les plus courantes. Il devra aussi démontrer la capacité de construire des phrases correctes qui s'enchaînent de façon cohérente dans un texte.

Form I : 1ère année

- La place /l'ordre des grands constituants dans la phrase canonique (classique) : sujet + verbe + COD/COI

- Phrase avec présentatif (« C'est moi qui… »)

- L'ordre des éléments dans les GN et les GV

- Les formes et les types de phrase (affirmative / négative, déclarative / interrogative / exclamative / impérative)

- La ponctuation de phrase (point, exclamation, interrogation, point-virgule, virgule, deux-points)

- La forme verbale (groupes, personnes, conjugaison, temps des modes indicatif impératif, participe)

- L'accord verbe-sujet, conjugué aux temps simples et aux temps composés (avec auxiliaires « être et « avoir », dans la phrase

- Le pronom COD dans des phrases déclaratives / exclamatives / impératives / interrogatives, affirmatives/négatives, avec verbe conjugué aux temps simples et composés

- La phrase complexe relative avec « qui », « que », « dont »

- La phrase complexe complétive et la phrase complexe conjonctive complément circonstanciel de temps et de lieu

- La grammaire du récit et de la conversation

Form II : 2ème année

- La structure des GN et des GV, et l'ordre des éléments dans ces syntagmes (déterminants, noms, adjectifs, adverbe, préposition, etc.)

- Construction de la phrase avec expansion avec bonne utilisation de prépositions / conjonctions / connecteurs

- La phrase avec sujet inversé

- Construction de la phrase avec expansion (dans le GN et le GV)

- Démontrer sa connaissance des éléments qui assurent la cohérence d'ensemble d'un texte…

- La forme verbale (participe présent)

- La valeur contextuelle des temps verbaux courants.

- La phrase complexe relative avec « dont », « où », « auquel », « duquel », etc.

- La phrase complexe conjonctive complément circonstanciel de cause, conséquence, manière, moyen, etc.

- La ponctuation dans le paragraphe

- L'organisation d'un texte en paragraphe

- La grammaire du texte informatif ou du texte de présentation

Form III : 3ème année

- Catégories sémantiques pour les noms (humains, concrets, animés, comptables, etc.)

- L'orthographe grammaticale à l'intérieur des GN (ex. une boîte d'allumettes)
- La valence des verbes. Catégories sémantiques pour les verbes

- La phrase complexe conjonctive complément circonstanciel de condition, de concession, etc.

- La phrase complexe interrogative indirecte

- Utilisation d'un éventail de procédés grammaticaux et lexicaux pour assurer la continuité et a progression d'un texte (périphrase, pronominalisation, synonymes, etc.)

- La ponctuation du texte (paragraphe, point de suspension)

Domaine: Communiquer à l'oral en français

Développer une compétence communicative et langagière orale permettant de bénéficier de l'environnement sociolinguistique francophone et de prétendre y évoluer.

Note : Il est important de corriger la faible part faite aux activités orales structurées et planifiées dans le cadre de la classe de français.

Contenu

1. Ecoute d'annonces, de messages divers et de documents sonores et visionnement de documents audiovisuels en français avec recherche de compréhension

2. Jeux de rôles et simulations de situations routinières ou courantes (ex : salutations ; présentation de soi /de quelqu'un ; demande ou offre d'information ; transactions diverses ; appel téléphonique ; message vocal; courses au supermarché /à la pharmacie, etc.; commande dans un fast-food, une pizzeria, un café ; etc. ;)

3. Exercices et activités oraux en vue de la pratique du français lors de situations courantes de la vie scolaire

4. Récits oraux de menus faits de la vie quotidienne

5. Discussions selon des modalités diverses (en groupes suivies d'une mise en commun ; interactives libres ou guidées avec la classe) à partir de thèmes, situations, phénomènes ou faits de société ou d'actualité ou sur un texte d'auteur, un film, une manifestation culturelle etc.

Domaine: Communiquer à l'oral en français

Développer une compétence communicative et langagière orale permettant de bénéficier de l'environnement sociolinguistique francophone et d'y évoluer avec une relative aisance

Contenu

1. Jeux de rôles et simulations reprenant des situations de la vie de tous les jours avec accent sur la syntaxe, l'expression et la prosodie.

2. Ecoute ou visionnement de documents sonores et audiovisuels traitant de sujets divers et prenant des formats divers (entretiens, reportages, débats, documentaires, magazines, etc.) avec restitution et graduellement discussion.

3. Récit /compte-rendu d'un événement vécu, d'un projet, d'un récit avec accent sur la cohérence

4. Concept fonctionnel de registre de langue

5. Vocabulaire lexical et discursif se rapportant à des situations d'étude et de travail scolaire et son réinvestissement de manière simulée ou authentique en classe

6. Présentation de chansons, poèmes, films, livres, etc.

7. Exposé sur un sujet convenu ou de son choix de manière guidée

Form III: 3ème année

Domaine: Communiquer à l'oral en français

Développer une compétence communicative et langagière orale permettant de bénéficier de l'environnement sociolinguistique francophone et d'y évoluer avec aisance

Contenu

1. Jeux de rôles et simulations reprenant des situations de communication professionnelles ou de service courantes avec accent sur la syntaxe (ex : en tant qu'agent de police, effectuer un contrôle de routine d'un automobile et de ses occupants ; qu'employé à l'accueil dans un supermarché ou au rayon réclamations dans un grand magasin de vente à crédit ; que réceptionniste dans une clinique, dans un bureau de service d'assurances, etc.)

2. Vocabulaire et registre de langue approprié pour les situations d'étude et de travail scolaire

3. Présentation d'un projet, de la réalisation d'un travail, d'une prise de position avec accent sur l'organisation logique de son propos

4. Présentation ou compte-rendus et interprétation et appréciation d' (extraits de) textes littéraires et d'oeuvres divers.

5. Ecoute ou visionnement à des fins de discussion/ débat de documents sonores ou audiovisuels à fonction informative et formatrice (ex : les magazines ou les débats radiophoniques de radios internationales comme RFI)

Domaine: Lire et écrire en français

1. Lecture de consignes : ex. justifier, énumérer, étayer, soutenir, relever, identifier, etc.
2. Lecture d'images (activités orale et écrite) : ex. affiche, photographie, poster, etc.
3. Lecture à voix haute : prononciation, articulation, segmentation
4. Lecture de différents types de textes : fonctionnels, sociaux, informatifs et littéraires (le récit)
5. Les stratégies de lecture globale et de lecture fine
6. Lecture du para-texte : titre, 1e et 4e pages de couverture, éditeur, chapeau, etc.
7. Lecture suivie en autonomie avec comptes-rendus de livres à l'oral et/ou à l'écrit (ex. club de lecture). Le choix des livres (BD, littérature grand public, littérature de jeunesse, œuvres classiques) sera varié et sera effectué en fonction du profil général des élèves.
8. Le champ lexical d'un certain nombre de thèmes
9. Activités autour du dictionnaire
10. Réemploi des mots nouvellement appris et emploi courant du vocabulaire acquis au primaire
11. Dictée de mots et de textes centrée sur du vocabulaire courant et de la grammaire de base
12. Prise de notes à partir de documents audio-visuels (documentaires, émissions pédagogiques comme « C'est pas sorcier »)
13. Ecriture de courts textes variés : fonctionnels (lettre …), sociaux et informatifs
14. Rédaction narrative (récit vécu et fictionnel) – production individuelle et/ou en groupe
15. Description d'une image au présent avec utilisation d'adjectifs, du participe présent et de quelques relatives, etc.
16. Réécriture d'extraits et écriture en anticipation

Form II: 2ème année

Domaine: Lire et écrire en français

1. Lecture à voix haute : segmentation, fluidité, intonation, expressivité.
2. Lecture de différents types de textes : fonctionnels, sociaux, informatifs et littéraires (récit et pièce de théâtre)
3. Les stratégies de lecture globale et de lecture fine d'une variété de textes relevant de quelques genres
4. Organisation d'un club de lecture donnant lieu à des appréciations d'un texte (ce que l'élève a compris, a aimé, etc.) à l'oral et/ou à l'écrit. Le choix des livres, varié, (BD, littérature grand public, littérature de jeunesse, œuvres classiques) sera effectué en fonction du niveau des élèves
5. Le champ lexical d'un certain nombre de thèmes
6. Activités autour du dictionnaire
7. Réemploi des mots nouvellement appris dans des exercices de vocabulaire et de rédaction
8. Dictée centrée de textes sur du vocabulaire élargi et le renforcement de grammaire (voir éléments de grammaire abordés en Form II)
9. Prise de notes finalisée à partir de différents textes (documents, articles de journaux, etc.)
10. Ecriture de courts textes variés (autres que ceux exploités en Form I) : fonctionnels et informatifs
11. Rédaction narrative (récit vécu et fictionnel) – production individuelle et/ou en groupe
12. Rédaction descriptive (un lieu)
13. Production seul et/ou en groupe de textes fictionnels divers (récits de fiction, mini-pièces de théâtre, planches de BD)

Domaine: Lire et écrire en français

1. Lecture à voix haute : intonation, fluidité, expressivité, etc.
2. Lecture de différents types de textes : fonctionnels, sociaux, informatifs et littéraires (récit, pièce de théâtre et poésie), etc.
3. Les stratégies de lecture globale et lecture fine développées à partir de différents types de texte et de procédés de repérage d'informations différenciés
4. Organisation d'un club de lecture donnant lieu à des analyses de texte (l'histoire, les thèmes, les personnages, etc.) à l'oral et/ou à l'écrit. Le choix des livres sera varié (BD, littérature grand public, littérature de jeunesse, œuvres classiques) et effectué en fonction du niveau des élèves
5. Le champ lexical d'un certain nombre de thèmes
6. Activités autour du dictionnaire
7. Réemploi des mots nouvellement appris dans des exercices de vocabulaire, de rédaction et de situations d'échange plus spontanées
8. Dictée centrée de textes sur du vocabulaire élargi et le renforcement de grammaire (voir éléments de grammaire abordés en Form III)
9. Prise de notes à partir de différents textes (Internet, livre, encyclopédie, etc.) dans le cadre de la recherche documentaire
10. Ecriture de courts textes variés (autres que ceux exploités en Form 1 et 2) : fonctionnels, informatifs et scientifiques
11. Rédaction narrative (récit vécu et fictionnel)
12. Rédaction descriptive (le portrait)
13. Production seul et/ou en groupe de textes fictionnels divers (récits de fiction, mini-pièces de théâtre, planches de BD, poèmes)

LES 3 PREMIÈRES ANNÉES AU COLLÈGE

COMPÉTENCE 1 : Communiquer à l'oral en français

Objectifs de l'évaluation

Les apprenants doivent pouvoir :

- entrer dans un dialogue

- décrire une situation ou une image

- évoquer des situations absentes ou imaginaires

- manifester une aisance et une certaine confiance à prendre la parole en français en   classe

- faire preuve de compétences communicatives en participant à des échanges individuels ou collectifs

- réagir verbalement de manière cohérente à des interpellations en français en montrant un souci accordé à la structure et au fonctionnement de la langue

- adapter la parole au contexte

Stratégies d'évaluation

- Participation orale active dans une conversation avec l'enseignant et les pairs
- Expliquer ce qu'il y a sur une affiche, une publicité figurant sur un 'billboard'
- Raconter un incident

- Récitation d'un texte poétique
- Exposé mené avec des camarades de classe
- Jeu de rôle
- Mise en scène d'un extrait d'une pièce de théâtre

Activités proposées pour l'évaluation

- L'enseignant peut poser des questions à un élève sur ses projets d'avenir

- L'enseignant peut demander à un élève de raconter un événement qui a eu lieu la semaine précédente dans la société/ à l'école/ dans sa famille

- Récitation et mise en scène

- l'Acte VI, Scène vii de *L'Avare*, 'Au voleur, au voleur….'
   ou une fable de La Fontaine

- Jeu de rôles

Un jeu de rôle est un jeu qui porte sur des sujets variés et que l'enseignant demande aux élèves de jouer en classe.

- Il peut demander aux élèves de se mettre en groupes (un maximum de 4 par exemple) et de préparer une scène quelconque. Celle-ci peut concerner une enfant qui ne veut pas aller à l'école, une invitation à un anniversaire, une conversation avec un enseignant/ avec un ami dans un supermarché/ à la poste avec l'officier qui est derrière le comptoir, etc…

COMPÉTENCE 2 : Lire et écrire en français

Objectifs de l'évaluation

Les apprenants doivent être en mesure :

- de lire avec fluidité un texte (narratif, descriptif, argumentatif…) avec des variantes expressives.
- de montrer une compréhension générale et de plus en plus affinée d'un texte fonctionnel ou littéraire de longueur et de complexité grandissante
- répondre en écrit de manière cohérente et structurée à des questions portant sur différents types de textes et documents.
- produire seul et/ou en groupe des textes divers

Activités proposées pour l'évaluation

- Exercices de lecture-compréhension
  a) Questions à choix multiples
  b) Exercices à trous
  c) Questions ouvertes

- Résumé

- Élocution / lecture expressive d'un texte

- Production de textes divers (récits de fiction, poèmes, planches de BD etc.), prolongement d'un texte

- Projet individuel ou collectif autour d'un thème (Exercice transdisplinaire)

COMPÉTENCE : COMMUNIQUER À L'ORAL EN FRANÇAIS   **NIVEAU DE SCOLARITÉ** : ………….. (Forme 1/ 2/ 3)

 MOMENT DANS L'ANNÉE : ……………… (ex. 1er TRIMESTRE-début/milieu/fin)   **DATE :** ……………………

Niveau de compétence :	1 : basique	2 : moyen	3 : bon	4 : très bon

Nom de l'élève : NIVEAU DE COMPÉTENCE (1, 2, 3..)

Capacité																														
1. Entrer, participer dans une conversation																														
2. Décrire une situation/ image																														
3. Evoquer des situations absentes ou imaginaires																														
4. Se servir du langage comme instrument d'analyse et de compréhension																														
5. Acquérir un langage riche et structuré																														
6. Manifester de l'aisance dans la communication																														
6. Adapter le discours à la situation																														

COMPÉTENCE : LIRE ET ÉCRIRE EN FRANÇAIS   **NIVEAU DE SCOLARITÉ** : ………….. (Forme 1/ 2/ 3)

MOMENT DANS L'ANNÉE : ……………… (ex. 1er TRIMESTRE-début/milieu/fin)   **DATE :** ……………………

Niveau de compétence :	1 : basique	2 : moyen	3 : bon	4 : très bon

Capacité																														
1. Lire et comprendre des consignes (*ex*. Justifiez, énumérez…)																															
2. Lire et comprendre des images (photographie, affiche, peinture…)																															
3. Lire à haute voix (prononciation, articulation, intonation)																															
4. Lire différents types de textes (fonctionnels,																															

sociaux …) - Lecture globale - Lecture fine																																
5. Repérage du paratexte (titre, 1e, 4e de couv. …)																																
6. Enrichir son vocabulaire par le champ lexical, l'usage du dictionnaire, …																																
7. Prendre des notes à partir de matériels audiovisuels																																
8. Produire de courts textes variés																																
9. Description en écrit d'une image																																
10.Récrire des extraits d'un texte littéraire																																

3 Mathematics

Introduction

We live in a fast-changing era and in order to function effectively in the real world, we must understand and be able to use Mathematics both in our personal as well as professional lives. Understanding and doing Mathematics provide numerous opportunities that open doors to other areas of learning. Mathematics is a powerful tool and an important component of our school curriculum. It helps to produce numerate citizens who can think logically and rationally, solve complex problems, make informed decisions and communicate fluently.

At the lower secondary level, the emphasis of the curriculum is on building and extending the foundational structures on which higher mathematics is to be constructed. At this stage, students are required to develop their ability to reason multiplicatively, algebraically and geometrically. The five strands of the curriculum (Numbers and numeration, Geometry, Measurement, Algebra, and Statistics & Probability) cover a range of concepts to build a solid groundwork to ensure that fundamental concepts take root and grow. Premised on sense making, the curriculum aims at helping students to develop knowledge, skills and attitudes to be able to 'mathematize' situations by formulating, solving and reflecting critically on problems. The lower secondary curriculum is also meant to arouse the curiosity of students and give them a mathematical experience where they derive satisfaction, enjoyment and confidence in learning mathematics.

The aims of Mathematics at lower secondary are to:

- acquire and apply skills and knowledge related to number, measure, geometry, algebra, statistics and probability;
- develop problem solving skills;
- develop an ability to reason logically;
- develop mathematical language as a means of communication and investigation;
- acquire a foundation appropriate for further studies in Mathematics as well as skills and knowledge pertinent to other disciplines;
- appreciate the pattern, structure and power of Mathematics;
- enhance intellectual curiosity and promote creative work arising from mathematical ideas;
- develop a positive attitude towards Mathematics, including satisfaction, confidence, enjoyment and perseverance.

Assessment objectives

Ongoing assessment in Mathematics should inform teachers where their students are in a particular knowledge domain and information gathered from students should guide instructional decisions. Assessment should also convey to students the skills they have already mastered and where they need improvement. The following outcomes are aimed at:

Knowledge and understanding

Students should be able to:

1. show understanding of relevant mathematical concepts;
2. show understanding and use mathematical terminologies and notations;
3. recall and use mathematical facts and procedures;
4. demonstrate knowledge of the use of manipulative and relevant computational skills;
5. present information in appropriate form.

Application

Students should be able to:
1. formulate mathematically a problem;
2. apply mathematical skills and techniques in problem solving.

Analysis and Evaluation

Students should be able to:
1. interpret and evaluate information;
2. make reasoned conclusions.

Curriculum content

Form I: Year 1

Numbers and Numeration

Integers	• Zero, positive and negative integers
	• Representation of integers on a number line
	• Order of integers
	• Arithmetic operations on integers
	• Square root of perfect square numbers
	• Mental arithmetic
Order and properties of operations	• Order of operations
	• Commutative, associative, and distributive properties
Factors and Multiples	• Factors, multiples, primes and prime factorization, H.C.F. and L.C.M.
Fractions and Decimals	• Meaning of fraction, types of fraction, equivalent fractions, ordering of fractions
	• Arithmetic operations on fractions
	• Decimal numbers and place value
	• Conversion between decimals and fractions
	• Arithmetic operations on decimals
Ratio, rate, and proportion	• Meaning of ratio, rate, and proportion
	• Application to consumer mathematics
Indices	• Exponential notation
	• Base and power

Geometry

Angles	• Geometrical terms associated with lines and angles
	• Working with angles
	• Supplementary and complementary angles
	• Vertically opposite angles
	• Angles formed by parallel lines and transversals
Polygons	• Polygons (up to decagon)

	• Properties of triangles and quadrilaterals
Coordinates	• Cartesian coordinates in two dimensions
	• Equation of lines parallel to the axes
	• Coordinates of midpoint of a line segment
Symmetry	• Line symmetry
	• Rotational symmetry (including order of rotational symmetry)
Transformation	• Introduction to Reflection, Translation, and Rotation
Locus	• Use of compasses, set squares, and protractor
	• Construction of parallel lines
	• Construction of perpendicular lines (including perpendicular bisector)
	• Construction of geometrical figures
	• Construction of bisector of angles

Measurement

Mass	• Mass in SI units
	• Conversion of SI units of mass
	• Arithmetic operations involving mass
	• Word problems involving mass
Length	• Length in SI units
	• Conversion of SI units of length
	• Perimeter
	• Arithmetic operations involving length
	• Word problems involving length
Area	• Area of squares, rectangles, parallelograms, trapezia
	• Conversion from one unit of area to another
Time	• 12-hour clock and 24-hour clock
	• G.M.T.
	• Conversion of time from one unit to another
	• Problems involving time
Speed	• Speed in practical situations
	• Average speed

- Conversion of units of speed (e.g., km/h to m/s)
- Word problems involving average speed, distance and time

Algebra

Algebraic expressions
- Algebraic representation of an unknown quantity
- Algebraic terms and coefficients
- Addition and subtraction of algebraic expressions
- Simplification of expressions involving brackets of the form $m(x + y)$ where *m* is a real number
- Multiplication and division of algebraic terms
- Evaluation of algebraic expressions

Algebraic equation
- Meaning of an equation
- Additive and multiplicative inverses
- Solving linear equations

Sets
- Meaning of sets
- Set notations
- Types of sets
- Venn diagrams
- Problems involving sets

Form II: Year 2

Numbers and Numeration

Real numbers
- Whole numbers
- Integers
- Rational numbers
- Irrational numbers
- Decimals (including non-terminating decimals)
- Set of real numbers
- Approximations
- Squares, square roots, cubes, cube roots, and applications
- Use of the symbols <, >, ≤, ≥, =, ≠

Factors and Multiples	- Factors, primes and prime factorization and H.C.F.
	- Multiples and L.C.M.
	- Problems involving H.C.F. and L.C.M.
Ratio, rate, and proportion	- Meaning of ratio
	- Writing ratios as fractions
	- Problems involving ratios
	- Meaning of rate
	- Scales in practical situations (including scale drawings)
	- Conversion problems in rate
	- Proportion
Percentage	- Percentages in real-life situations
	- Conversion between percentages, fractions and decimals
	- Expressing one quantity as a percentage of another
	- Operations involving percentages
Personal and Household Finance	- Profit and Loss
	- Discount
	- Commission
	- Simple interest
	- Hire purchase

Geometry

Polygons	- Properties of regular polygons
	- Interior and exterior angles
Trigonometry	- Right-angled triangle
	- Pythagoras' theorem
Coordinates	- Equation of lines parallel to axes
	- Generating points using equation of lines
Transformation	- Translation of a line segment and a polygon
	- Translation vector
	- Reflection of a line segment and a polygon
	- Location of mirror line
	- Rotation of a line and a polygon
	- Centre and angle of rotation

Circles	• Vocabulary of circles
	• Properties of circles associated with radius, diameter, and chords
Vectors	• Meaning of a vector quantity
	• Graphical representation of a vector
	• Equivalent vectors
	• Position vectors
	• Displacement vectors

Measurement

Length	• Perimeter, circumference, arc length
Bearing	• Three-figure bearings
Area	• Area in real life situations
	• Conversion of units of area
	• Area of circle and circular disc
	• Area of sector
Surface area	• Nets
	• Surface area of a cube
	• Surface area of a cuboid
Volume	• Volume of cube
	• Volume of cuboid

Algebra

Expressions	• L.C.M. of algebraic terms
	• Algebraic fractions
	• Operations on algebraic fractions
	• H.C.F. of algebraic terms
	• Factorization of algebraic expressions (including compound factors)
	• Factorisation by grouping

Equation	• Solutions of equation (including algebraic fractions)
Inequalities	• Algebraic inequations
	• Solution set of linear inequalities
Sets	• Operations on sets

Form III: Year 3

Numbers and Numeration

Indices	• Index form
	• Multiplication, division, and power law of indices
	• Multiplication and division laws with same power
	• Problems involving indices
Sequences	• Sequences arising from number patterns and figures
	• Extension of given sequences
Personal and Household Finance	• Conversion of currencies
	• Profit and Loss, Discount, Hire purchase
	• Simple and compound interest
	• Salaries and Wages
	• Taxation and deduction
	• Interpretation of Tables and Charts

Geometry

Trigonometry	• Sine, cosine and tangent ratios for acute angles
	• Trigonometrical problems in two dimensions
	• Angles of elevation and depression
Coordinate geometry	• Gradient of a straight line
	• Gradient of parallel lines
	• Equation of a line in the form $y = mx + c$
	• Straight line graphs in practical situations
Similarity	• Similarity and congruency
	• Area of similar figures

	• Volume of similar solids
Transformation	• Enlargement
	• Centre of enlargement
	• Scale factor
Vectors	• Vector representation (graphical and notational).
	• Scalar multiplication
	• Addition and subtraction of vectors
	• Parallel vectors
	• Magnitude of a vector

Measurement

Surface area	• Surface area of cylinder
	• Surface area of right prism
	• Problems involving surface area
Volume	• Problems involving volume of cube, cuboid, cylinder, right prism, sphere, and cone
Capacity	• Internal volume
	• Conversion of units of capacity
	• Word problems involving capacity

Algebra

Expressions	• Binomial expression
	• Product involving binomial expressions
	• Expansion and numerical application of (i) $(a+b)^2$, (ii) $(a-b)^2$, (iii) $(a+b)(a-b)$
	• Factorisation of difference of two squares
Matrix	• Meaning of a matrix
	• Order of matrix
	• Types of matrices
	• Operations on matrices
	• Solving matrix equation

	• Matrix application in practical situations
Quadratics	• Quadratic expressions
	• Factorisation
	• Solutions of quadratic equations
	• Problems involving quadratic equations
Algebraic manipulation	• Subject of formula
	• Evaluation of formula
	• Manipulation of algebraic equations leading to quadratic equations
Indices	• Index form
	• Simplification of expressions involving indices
	• Solutions of equations involving indices
Simultaneous equations	• Meaning of simultaneous equations
	• Graphical method
	• Substitution method
	• Elimination method
	• Simultaneous equations in practical situations
Sets	• Operations on sets

Statistics & Probability

Statistics	• Collection, classification and tabulation of statistical data
	• Frequency table
	• Charts (bar charts, pie charts, pictograms)
	• Interpretation of charts and graphs
	• Mean, mode, median
Probability	• Sample space, events, outcomes
	• Probability of simple and compound events
	• Possibility diagrams
	• Probability and set notations
	• Exhaustive, mutually exclusive, and independent events

Additional notes to Educators

Teaching strategies in mathematics

Making sense of Mathematics and developing conceptual understanding are necessary for the effective learning of the subject. To promote conceptual understanding it is recommended that teachers use a range of teaching strategies (e.g., guided-discovery, collaborative learning, inductive teaching, ICT tools, etc). These strategies will allow teachers to:

1. create opportunities for students to reason rather than just manipulate procedures;
2. give opportunities to students to represent, connect and communicate mathematical ideas;
3.   empower students at solving both routine and non-routine problems.

Problem-solving should be used as a vehicle to construct concepts. Careful selection of problems to be presented to students is very important for meaningful learning to take place. Mere reliance on prescribed textbooks may not lend to the learning of significant mathematics. Besides fostering the development of mathematical skills, teachers are also advised to prompt students to verify the reasonableness of their answers, develop estimation skills, and enhance mental arithmetic skills.

Evaluation in Mathematics

The mathematical skills expected from our students at the lower secondary level cannot be adequately assessed with only the commonly used paper-and-pencil test. For assessment to be effective, teachers are required to use a variety of assessment techniques which include the following:

(1) Short-answer tests;
(2) Open-ended problems;
(3) Multiple choice tests;
(4) Math projects and investigations;
(5) Math portfolio;
(6) Writing assignments;
(7) Computer demonstrations;
(8) Presentations in Mathematics.

Brief Description of Mathematics Assessment Tools

Short-Answer tests

Short answer questions are similar to completion items except that a question is written in its entirety, with the student supplying a correct response of one word or a short phrase. Supply items are frequently used for recall of information and for problem solving in mathematics (where the student is asked to supply the answer to a calculation or the result of a formula).

Open-ended problems

Open-ended problem tasks are thought of as tasks for which more than a single correct solution is possible, and that they offer students multiple approaches to the problems. They can range from simply asking a student to show the work done on a problem to involving complex situations requiring formulating hypotheses, explaining mathematical situations, writing directions, creating new related problems, or making generalizations.

Multiple choice tests

Multiple choice tests can play a very useful supporting role in self-examination particularly with regards to foundational material (e.g., definitions or basic rules of calculation). Such questions can address quite directly (and with immediate feedback) whether one has any misunderstanding on a specific point, without needing the direct intervention of the teacher.

Math projects and Investigations

Math Projects are experiences that connect mathematical concepts and procedures to engaging real-world activities that extend for more than one lesson. Key to the project concept is that the mathematics emerge from students' own investigation of an authentic situation, rather than a classroom exercise. This helps students see ties between mathematics and real-life experiences.

An investigation may be defined as a situation originating in mathematics or the real world which lends itself to inquiry. A mathematics investigation allows students to examine a situation using various techniques and in the process of their exploration develop skills that can be applied to other problems. Such investigation work shows to the teacher what students can or cannot do.

Math Portfolio

A math portfolio contains samples of a student's work that are collected over a given length of time. A good portfolio offers insights to a student's thinking, understanding and mathematical problem-solving skills, and thus offers a picture of the student's progress in math.

Writing Assignments

Teachers can also incorporate writing in math class to help students reflect on their learning, deepen their understanding of important concepts by explaining and providing examples of those concepts, and make important connections to real-life applications of the math they are learning. Teachers can use the writing assignments to assess students' understanding of important concepts as well as their attitudes towards mathematics.

Computer demonstrations

Carefully selected software foster the creation of important mathematics from students and nurture creative thinking. For instance, exploration in Excel and Geometer's Sketchpad can provide teachers insightful understanding of students' knowledge and skills in the domain of statistics and geometry.

Presentations in Mathematics

Integrating presentation tasks into mathematics teaching and learning helps in developing students' ability to illustrate, to interpret, to explain, and to discuss mathematical ideas and their experiences in learning mathematics. Students should be given the opportunities to speak and write or communicate their understanding of mathematical ideas. These presentations can provide valuable information about students' competencies.

4 Information and Communication Technology

Introduction

Information and Communications Technology (ICT) has developed to become an integral part of everyday life. It influences the lives of people everywhere in the world. Almost every aspect of our daily lives now implies using ICT. In the increasingly dynamic world of work, people need to be able to work effectively with ICT, develop transferable ICT skills and apply those skills in different contexts, and with different software packages.

In the context of the current curriculum reform, rooted in an evolving social and economic context, students use ICT tools to find, explore, analyse, select, exchange and present information in a responsible and creative manner. They learn how to employ ICT for rapid access to information, ideas and experiences from a wide range of people, communities and cultures. Increased capability in the use of ICT promotes initiative and independent learning with students being able to make informed judgments about when and where to use ICT to the best effect, and to consider its implications for home and work, both at present and in the future.

The aims of Information and Communication Technology   at lower secondary are to:

The learning of ICT as a subject provides opportunities for students

- to develop an awareness of the nature and importance of ICT in a rapidly changing world.
- It enables students to acquire the relevant knowledge and skills and a better understanding of ICT.
- Students become competent and confident users of ICT which they use for various purposes, such as to produce reports, perform mathematical calculations, modelling, and to work on computer-based projects.

Assessment objectives

Students should be able to:

- Demonstrate an understanding of social, legal, ethical and economic issues relevant to the use of ICT in modern society.
- Demonstrate an understanding of health and safety issues in the use of computers.
- Show confidence and competence in the handling of the computer and the use of computer applications.
- Access, select, interpret and evaluate information for suitability, correctness, and currency.
- Communicate with others, using computer-mediated commutation.
- Produce multimedia-based reports.
- Perform mathematical calculations and modelling using the computer.
- Effectively present their work, using appropriate computer applications.

Curriculum content

Form I: Year 1

Computer System

Describe the various types of computers: microcomputer, minicomputer, mainframe, and supercomputer

State the use of various computer peripherals: printer, camera, scanner, plotter, internal memory (RAM, ROM, Cache), specialized cards e.g. network, graphic cards and other peripherals

Describe the components of a computer system

- Notebooks, Laptop Computers, Palmtops, Tablets, PDA, Workstations and other types of portable computers
- Desktop computers

Computer Operation

Start and shut down the computer system.
- Switch on the computer safely
- Shutdown properly

Work with the Windows environment.
- Minimize, maximize, restore and close windows
- Use of mouse and keyboard

Store files on the computer
- Open, save and close files
- Open a new files

Using Computer Applications for Problem Solving

List various computer applications: Introduction to Computer Software, types of software: system software, application software, application software- ready-made, tailor made, productivity tools- word processing, spreadsheet, database, presentation graphics, accounting packages, accounting packages, graphics packages, games

Use various computer applications to perform tasks such as writing of simple reports, doing calculations, and drawing: creating, editing, formatting, and adding graphics to a document. Performing simple calculations using a spreadsheet; creating drawings using a graphics package

Electronic Communication

Use the Internet to access web pages and perform simple searches.: Introduction to the Internet and World Wide Web, The Web browsing software and using the Internet, Search engines, keywords and Uniform Resource Locators, Searching the Web

Send and receive emails: Introduction to electronic mail and creating an email account, Accessing the email account using username and password, Components of an email (subject, address, cc, Bcc), Composing, sending, retrieving and forwarding emails, Accessing web pages using URLs

Computer Ethics, Health and Safety

Show awareness of various health and safety issues in relation to the use of computers and take preventive measures:

- Working safely with a computer
- Precautions in using a computer
  - Proper placement of the equipment and furniture
  - Good posture and proper hand position
  - Computer hazards and safety precautions
- Computer laboratory guidelines
- Guidelines on the proper care of computer equipment

Computer System

Compare the computational capabilities of various types of computers: microcomputer, minicomputer, mainframe, and supercomputer

Differentiate between the different types of peripherals: printer, camera, scanner, plotter, internal memory (RAM, ROM, Cache), specialized cards e.g. network, graphic cards and other peripherals

Computer Operation

Manipulate the Windows environment confidently.
- Open and manage different windows simultaneously
- Use recycle bin
- Use toolbars and menu

Manage stored computer files.
- Locate and run files and programs from the start menu
- Search for files and folders
- Delete, copy, rename and move files and folders

Produce print-outs of work done on a computer.
- Use print, print preview
- Margins, paper orientation setting
- Use printer setup

Using Computer Applications for Problem Solving

Produce graphically-enhanced reports: produce graph and charts using a spreadsheet package

Perform mathematical calculations and modelling. Use formula, predict outcome using various scenarios

Use presentation software to develop simple multimedia presentations: Use presentation software, add, delete, modify slides, add simple effects. Perform slide show

Electronic Communication

Use the Internet to perform complex searches and download files: Using the Internet to perform complex searches using refined keywords, Downloading files from the Web,Using multiple search engines and Meta search engines

Share files via emails: Attach files to email and retrieving email attachments, The Address Book, Tracing the History of previously accessed web pages, Email versus the postal service (snail mail)

Computer Ethics, Health and Safety

Show understanding of ethical and social issues related to the use of ICT: Computer Ethics, Information Privacy and security of data, Ownership & Copyright, Internet resources and its social impact, Software Piracy, Computer crime and hacking

Show understanding of the various threats to the computer system and of the ways in which it can be protected: Computer viruses and Antidotes, Precautions on how to avoid virus attacks, Data backups to avoid data losses

Form III: Year 3

Computer System

Discuss the importance of operating system

- Functions of operating system

Explain how data is stored in various computer storage devices

- Relationship of data representation: bit, byte and character
- ASCII code
- Units of measurement : Bit, Byte, Kilobyte (**KB**), Gigabyte (**GB**), and Terabyte (**TB**)
- Units of clock speed measurement: Megahertz (MHz), Gigahertz (GHz)

Describe the different types of operating system

- The various types of operating system used In different platforms
- The different interfaces of OS **:** Command driven and Line Interface e.g. DOS and graphical user interface e.g. Windows XP

Computer Operation

Use different input/output devices.
- Scanners, printers, speakers, microphones

Use the control panel to perform simple tasks.
- Manage desktop
- Set time and date
- Modify attributes of the monitor
- Install/uninstall programs

Perform basic trouble-shooting.
- Deal with common error messages
- Defragmentation of hard disk

- Use of antivirus
- Backup and restore
- Disk cleanup

Using Computer Applications for Problem Solving

Use advanced features of computer applications in problem solving tasks: page layout and print options of word processor and spread sheet packages, sort data, use formulae and functions, replicate formula and functions. Database: understand structure of databases, create and modify a database structure, set primary key, create tables, queries, forms and reports

Develop purposeful multi-media presentations for a given audience: enhance a presentation by inserting images and graphic s, adding animation and transition effects

Write computer programs for simple problems: understand the importance of programming languages for writing programs, high level language and machine code, stages in developing a computer program, algorithms and flowcharts,

Electronic Communication

Describe various computer networks: Types of networks, Network topologies

Demonstrate understanding relating to gaining access and using the Internet:
Hardware and software for accessing the Web, The Internet Service Provider, Linking web pages using hyperlinks, Inserting images in a web page

Evaluate the suitability, accuracy and currency of web-based materials. Evaluating the suitability, accuracy and currency of web resources, creating simple web pages using HTML

Use the Internet to engage in e-discussions.: Online interaction and collaboration using a network

Computer Ethics, Health and Safety

Show understanding of economic issues related to the use of ICT: Economic impact and benefits for computerizations, Changes to the environment and training practices, Reliance on computers, Services to computer users – E-shopping, E-commerce, Online banking, Online booking, Telecommuting, Teleconferencing, Future of computers in our society

Additional notes to Educators

- Use of personally relevant tasks that students can find useful to engage with, such as the design of greeting cards that they can then send to loved ones, research on various topics.
- Tasks of manageable difficulty and challenge so that individual attention can be given to those who need it while more able ones feel challenged enough to work on their own.
- Problem solving and inquiry-based learning such as preparing a home budget, model using spreadsheet.
- Use of practical tasks along with off-computer tasks so that students realise that not all tasks need to be performed by the PC.
- Activity-based tasks with either group or individual students along with class discussion to encourage debates and sharing of views on an issue.
- Use of a combination of exposition, demonstration and hands-on approach.
- Integration of theory with practice to show the connection between these two, for example, by making practical sessions to immediately follow theory classes.

5 Science (Form I- II) – Biology, Chemistry, Physics (Form III)

Introduction

We are living in a world today which is highly influenced by scientific and technological development. We are also facing unprecedented increasingly new challenges in all spheres of our life. These challenges are diverse and they range from economical, social, cultural and natural. Rapid advances in Information and Communication Technology (ICT) are affecting our behaviour to deal with emerging issues as it is its use to make the most of information that counts[1]. We therefore need a citizenry who can understand the challenges and who is equipped with knowledge, competencies and skills to address those existing and emerging issues.

The situation in Mauritius is that there is a decline in the entries for sciences at upper secondary level. It is believed that the lower secondary science syllabus should aim at developing an interest among our youth for sciences at an early age and it is in this context that this syllabus for science, technology and society has been worked out. It covers all issues we face in our contemporary society; energy, food, health, sustainable development, poverty, disasters, natural resources, etc. The syllabus offers an integrated approach to science in F I and FII but at F III it offers biology, chemistry and physics as separate subjects.

It is important that textbook writers understand the philosophy behind the Form I and II curricula, highlighted in the National Curriculum Framework for Secondary. Though at the two levels, concepts of science have been clearly spelt out, it is of paramount importance that the concepts are developed in an integrated way, taking into consideration authentic contexts (Falk & Yarden, 2009)[2]. The development of the concepts should be done within a predefined authentic context in which all the various science concepts will emerge. In this way, this authentic context provides learners with a bridge from primary science to secondary science and learning of science does not become disunited.

At Form III, science takes the shape of biology, chemistry and physics so as to prepare learners to take the right decision as to whether they wish to opt for the core sciences or the 21st century science.

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[1] Beller, M. (1997), 'Integrating technology into distance teaching at the Open University of Israel', ALN Magazine, Vol. 1 (1).
[2] Falk, H., Yarden, A. (2009), "Here the Scientists explain what I said". Coordination practices elicited during the enactment of the results and discussion sections of adapted literature", *Research in Science Education*, Vol 39(3), pp.349-383

The aims of Science at lower secondary are to:

- Acquire knowledge and understanding of important scientific ideas and explanatory frameworks that relate to their everyday life experiences and needs.

- Select and apply scientific knowledge, understanding and skills across a range of contexts in their daily life.

- Understand how scientific inquiry is conducted and appreciate the reasoning and kinds of evidence that underpin scientific knowledge claims.

- Discuss with confidence a range of personal, social, ethical and other issues that have scientific and technological dimension.

- Develop skills and attitudes necessary to help them contribute to sustainable social and economic development.

- Communicate scientific understanding to different audiences for a range of purposes, including safe practices.

- Appreciate the role that science and technology, including ICT, play in the modern world.

- Search for relevant scientific data and information from a wide range of sources and communicate these effectively through various means.

Assessment objectives

Assessment *for* learning (formative)

The National Curriculum Framework recommends the development of assessment tools for learning which is an important asset for teachers to monitor students' learning and provide them with a sense of achievement. It is expected that teachers will have developed the necessary knowledge, competences and skills to tailor their lessons so that assessment *for* learning becomes a regular feature. Assessment *for* learning is meant to improve learning by assessing and analysing progress of learners and feeding back the outcomes into the lesson with a view to helping them improve and also to bring changes in teaching methods to address learners' difficulties.

The assessment *for* learning should be inbuilt with diagnostic assessment for educators to monitor learning and also to adopt appropriate learning tools to address students' difficulties. The assessment *for* learning is not formally assessed; however teachers are required to keep record of progress of students. A checklist has been provided in Annex 1.

Continuous Assessment (60%)

It is recommended to carry out continuous assessment on a regular time frame, most probably every fortnight so as to monitor progress of students. Continuous assessment is implemented in a variety of ways over time to give students time to internalise learning. The following modes of continuous assessment may be used: class tests (direct marking), class exercises (direct marking), project work (Annex 2), oral presentation (Annex 3), portfolio (Annex 4), homework (Annex 5), practical work (individual/group – Annex 6).

Assessment *of* learning (40%)

This type of assessment is carried out to assess students during the end of term examination. It is essentially a test or an examination.

Competencies

Comprehension & Knowledge

Students should be able to:

- demonstrate understanding of science concepts
- explain relevant science processes

Application & Analysis

Students should be able to:

- apply acquired knowledge and skills in novel situations including practical work
- analyse situations critically for better understanding

Synthesis & Evaluation

Students should be able to:

- generate new meaning based on acquired knowledge
- conclude by making relevant judgements on ideas

Weightings

Continuous Assessment (60%)

Assessment of learning (40%)

Curriculum content

Form I: Year 1

The science curriculum for Form I is an integrated one and is composed of issues related to everyday life situations. The concepts have to be introduced within an authentic context[3] that will enable students to use first-hand experience as well as second-hand experience to construct purposeful knowledge. Examples of issues could be introduced which encapsulate the concept.

The development of the resource materials should be done in an integrated way otherwise it defeats the whole purpose of integration.

Energy and Matter
The context: A specific environment where there are a number of activities taking place that capture sources of energy, energy conservation, matter, characteristics of life.

- Sources of energy
    - Solar energy
    - Wind energy
    - Geothermal energy
    - Biomass
    - Natural gas
    - Coal
    - Fossil fuel
    - How energy is useful to sustain life?
- Energy conservation
    - Why to conserve energy?
    - Renewable and non renewable sources of energy
    - Energy conservation at home and at school
- Matter and its importance and properties
    - Matter v/s energy
    - Occurrence of matter in our everyday life and its importance
    - Properties of matter.
    - What is matter made up of?
    - States of matter and their properties; Changes of states.
- Characteristics of life
    - Movement
    - Respiration
    - Sensitivity
    - Growth
    - Reproduction
    - Excretion
    - Nutrition

The Environment

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[3] Falk, H., Yarden, A. (2009), "Here the Scientists explain what I said". Coordination practices elicited during the enactment of the results and discussion sections of adapted literature", *Research in Science Education*, Vol 39(3), pp.349-383

The context: Activities taking place on Earth which captures a number of processes occurring on land and in water.
- The solar system
  - the sun and the eight planets
- Earth, its structure and formation
  - The composition of the earth
- Biotic and abiotic factors
  - Living things
  - Non-living things (chemical, physical factors)
- Classification of life and relationships
  - Simple and complex organisms
  - Relationships (such as feeding)
- Air, water and soil
  - Occurrence of air, water and soil on Earth
  - Water – its importance and properties
  - Air – its composition, properties and importance
    - testing for presence of carbon dioxide and water vapour in air
  - Soil – its importance

Sustainable Living-Use of resources

The context: Instances of sustainability are introduced within a specific contextual set up.
- Energy and resources: Renewable and non-renewable
  - Examples of renewable and non-renewable resources and their uses
  - The physical life cycle
- Natural and man-made resources and materials
  - Examples of natural and man-made resources and materials and their uses
- Protection of environment
- Resources management
- Conservation of nature and resources

Health and safety

The context: Our context, a hospital for example, is taken into consideration and highlights to good health habits are made.
- Basic structure and functions of the human body
  - Cell, tissue, organ and system
  - Systems and major functions (brief introduction)
- Health risks and abuses
  - Risky behaviour
  - Abuses (sexual abuse, tobacco /alcohol abuse)
- Disease: communicable and non-communicable
  - Communicable diseases (Chikungunya/Malaria, HIV/AIDS); notifiable disease
  - Non-communicable disease (Obesity, Diabetes)
    (we may highlight the causative agent/factors, some signs and symptoms, treatment)
  - Measures to prevent from diseases (preventive Treatment)
- Safety at home, school and other places
- Risks associated with some chemical substances in our everyday life

Science and Technology

The context: *A hi-tech hospital or other place where technology is impacting on the lives of people is introduced. Elements of health and safety can also be merged here.*

- History of science through major discoveries
  - Three major discoveries in science and their impact on our life
- Applications of science and technology in our daily life
  - Use of S & T in industry, medicine
- Impact of S & T in our daily life
  - Benefits of S& T

Form II: Year 2

Energy

The context: *The interrelation between energy and matter forms the basis of the context.*
- Forms/Types of energy
- Conversion of energy and Energy Flow
- Basic units of matter: elements, mixtures and compounds
  - Metal and non metals
  - Atoms, symbols, valencies, molecules and formulae; Finding formulae of compounds
- Physical and chemical changes and their importance in living organisms
  - Chemical changes and word equations

The Environment

The context: *The effects of human's involvement in a given locality form the basis of the context.*
- Ecosystems and ecological interactions
- Types of forces in nature their effects on shapes
- Human activities and their impact on environment
- Types of pollution; causes, consequences and prevention
  - Air and water pollution
- Protection of the environment

Sustainable Living- Use of resources

The context: *A case study could form the basis of the context.*
- Importance of conservation of natural resources
- Choice and use of energy and their impact on the environment
- Sustainable living
- Simple audit of resource
- The 3 R's concept
- Alternatives to existing resources

Health and safety

The context: *A clean environment that favours good life style forms the basis of the context.*
- Human Body Systems and their functions
- The menstrual cycle and fertilization leading to foetal development
- Chemical substances: acids, bases and salts and their importance
- Hazards associated with chemical substances
- Effect of quality of environment on human and public health
- Importance of a clean environment for a healthy living

Science and Technology

The context: *A hi-tech industry forms the basis of the context.*
- Common applications of science and technology in our daily life
- Ethical issues associated with the applications of science and technology in our daily life
- Limitations of science and technology

Form III: Year 3

BIOLOGY

The Cell: Cell Structure and Cell Multiplication
- explain the cell as a unit structure of a living body
- differentiate between prokaryotic and eukaryotic cells
- distinguish between a plant cell and an animal cell
- describe the process of cell division
- explain the role of genetic material in a cell and relate it to chromosomes and genes in a living body
- estimate the magnification of a diagram of a cell
- draw appropriate diagrams to illustrate various concepts

Identification of all forms of Life-Classification of Living Organisms
- describe the structure of a single cell organism
- relate its structure to its functions as a whole living entity
- ~~to~~ describe the organization of cells into tissues, organs and organ systems
- develop an understanding of the role specialized cells in complex organisms
- identify features and characteristics for elaborating a key for classification of organisms
- explain biodiversity and its importance to mankind
- reflect on the threats towards biodiversity and formulate solutions to these threats

The Life Processes
- explain breathing as a physical process in aquatic and terrestrial organisms
- explain respiration as a process for energy production
- explain why animals move from one place to another
- describe how plants, animals and microbial organisms get food from their environment
- list the wastes produced in living organisms and the ways of their disposal from the body
- describe reproduction as a process of maintaining a species
  - Explain briefly the menstrual cycle
  - Demonstrate an understanding of fertilisation and development of the foetus
- explain sexual and asexual reproduction
- explain growth as a process of cell multiplication, increase in size and increase in complexity

Diseases: Communicable and Non-Communicable
- differentiate between communicable and non-communicable diseases
- determine the characteristics of an infectious disease and its risks
- explain sexually transmitted infection and their significance
- explain the causes, signs and symptoms, complications, treatment and consequences of the prevalent diseases in the country
- identify the venues where testing and counselling for CD and NCD including STI or HIV status can be done

Ecology and Society

- list different types of environment
- explain the dynamics in terms of inputs and outputs in ecosystems
- comprehend the equilibrium state in a given ecosystem
- explain the threat towards disturbing a balanced ecosystem
- assess the impact of imbalances on the ecosystem and their consequences in the environment as a whole
- develop the ability to implement an environmental management plan, and manage and make sustainable use of resources in various environments
- carry out a project involving environmental auditing using appropriate tools (e.g checklist) and identify specific areas needing improvement

CHEMISTRY

Chemical substances

- Recall about elements, mixtures, compounds, symbols, formulae, atoms and molecules.
- Distinguish between elements, mixtures and compounds and give examples of each.
- Demonstrate an understanding of the Periodic Table as a classification of elements
- Recall about acids and bases and their importance.
- State what the pH scale is and show an understanding of its importance.
- List some simple indicators and state their colors in acids and bases.

The Language of Chemistry

- Differentiate between physical and chemical changes
- Show an understanding about how elements and compounds are represented by symbols and formulae.
- Recall about how to find formulae of compounds using symbols and valencies (Form II)
- Demonstrate an understanding of chemical reactions, reactants and products.
- Appreciate that chemical reactions involve rearrangement of atoms and that during a chemical reaction new substances are produced.
- Convert word equations to chemical equations.
- Write and balance chemical equations.

Chemical reactions in general

- Recall the meaning of chemical reactions, reactants, products, word equations and balanced chemical equations and the characteristics of chemical changes.
- Identify and state the importance of some simple equipment and glassware used in Chemistry.
- Explain how different compounds can be made by chemical reactions.
- Appreciate that different metals differ in their reactivity and demonstrate an understanding of the reactivity series of metals.
- Demonstrate an understanding of some chemical reactions as stated below:
  - ▶ Use the reactivity series of metals to investigate and describe:
    - ○ *The chemical reactions of some metals with air, water and dilute mineral acids.*
    - ○ *Displacement reactions.*
  - ▶ Describe and explain how hydrogen, oxygen and carbon dioxide gases can be prepared by chemical reactions in the laboratory.
  - ▶ Show an understanding of the process of rusting and how it can be prevented.

Important chemical reactions

- Recall about acids and bases
- Describe neutralization reaction and some characteristic reactions of acids and bases.
- Show an appreciation of the importance of neutralization in cases of indigestion and insect stings, in agriculture and in the prevention of acid rain.
- Explain combustion, respiration and photosynthesis as chemical reactions and demonstrate an understanding of their importance.
- State the importance of respiration and photosynthesis in maintaining the composition of air.
- Relate burning of fuels to global warming and acid rain.

Experimental techniques in Chemistry

- Consolidate knowledge and understanding about different types of mixtures.
- Recall the different changes of states (evaporation, freezing, melting, boiling and condensation)
- Recall about simple equipment and glassware used in Chemistry
- Define the terms boiling point, melting point and freezing point.
- Appreciate the importance of pure substances.
- Identify and describe some techniques that can be used for separating the components of different types of mixtures.
- Show an understanding and appreciation of the applications of different separation techniques in real life context.

PHYSICS

Measurement

- measure length using metre rule, measuring tapes and Vernier callipers
- explain a few types of errors in measurement and their prevention (end error, zero error, parallax error)
- measure the volume of liquids using measuring cylinders
- measure time using stopwatch – digital and analogue
- measure mass using an electronic balance and beam balance
- calculate the volume of regular solids using appropriate formulae
- determine the volume of irregular solids, using the displacement method
- enumerate a few precautions taken during measurement of simple quantities
- explain the need to make accurate measurements

Motion

- explain the meaning of linear motion
- define distance and displacement, state their units
- explain the difference between distance (scalar quantity) and displacement (vector quantity)
- calculate distance and displacement in different examples
- define speed and velocity and state their units
- differentiate between speed and velocity
- calculate speed and velocity using speed = distance / time and velocity = displacement / time
- calculate average velocity as compared to instantaneous velocity
- define acceleration and state its unit
- calculate acceleration using a = (v – u)/t
- draw graphs to illustrate motion; distance – time graph, speed-time graph

Energy

- explain the meaning of energy and state its unit
- illustrate the various forms/types of energy and their conversion
- identify some sources of energy in the local context and list their advantages and disadvantages related to global warming and climate change
- explain the meaning of work done and state its unit
- state the relation between energy and work done
- calculate kinetic and potential energies using appropriate formulas; $E_k = \frac{1}{2}mv^2$ and $E_p = mgh$
- explain the meaning of power and state its unit, e.g., the meaning of a bulb having a power of 60W
- discuss ways and means to save energy (electricity and fuel) to combat climate change/global warming

Optics

- recall that light travels in a straight line and light enables us to see
- differentiate between luminous and non-luminous bodies
- state the laws of reflection of light
- discuss common application of reflection of light
- state the laws of refraction
- discuss common application of refraction of light

Electricity

- understand that matter consists of charges
- explain current as a flow of charges
- use an appropriate analogy to explain current (flow)
- explain what is meant by potential difference using an appropriate analogy
- recognise that resistance is the opposition to current in a conductor
- determine resistance, using Ohm's law
- determine combined resistance when resistors are connected in series and parallel in circuits (2 resistors)
- calculate current, potential difference and resistance in simple circuits
- state ways to use electrical energy safely at home and at school
- state ways of saving electrical energy and the rationale behind it

Additional notes to Educators

It is envisaged that maximum use of ICT based lessons is made. (ICT based PowerPoint lessons)

Formative Assessment Checklist

Name of student: ……………………………………………………………..

Class: …………………………………………..

Domain	Competences	0	1	2	3
Group work	Sharing of ideas and information with peers in a group				
	Participating in a discussion/debate/class activities				
	Following the group instructions to carry the assigned task				
Conceptual understanding	Demonstrating knowledge and understanding of concept during delivery				
	Explaining/describing a process, an event, a phenomenon				
	Relating the concept/content to everyday life situation (in context)				
	Applying the knowledge and understanding in different contexts and situations				
Problem solving	Identifying a problem situation from a given context				
	Formulating proposals to solve the problem				
	Developing a plan of action to remedy the problem				
	Evaluating the solutions proposed to solve the problem				
	Able to solve a numerical problem				
Communication	Reporting an event, a process, a situation, an information in an explicit way (oral or written)				
	Listening to others and asking questions				
	Presenting his/her ideas, proposals in a dialoque/ debate				
	Supporting ideas with appropriate and valid support and justifications				
	Understand, reformulate and execute an oral instruction				
	Looking for relevant information/data form				

	appropriate sources (internet, journals, textbooks, ...				
Practical/Field work	Reading, understanding and following instructions carefully				
	Showing respect for all safety measures and precautions				
Practical/Field work	Identifying, selecting materials and equipment for practical				
	Handling of materials and equipment				
	Collecting appropriate data and information from diverse sources				
	Presenting data/information for easy interpretation				
	Planning, designing small scale investigations				
	Interpreting/analysing a document (photo, article, graph...)				
	Evaluating the relevance of information collected				
	Conducting surveys to gather information/data				

(to tick)

0: Competence not acquired   1: Competence being acquired

2: Competence partly acquired   3: Competence acquired fully

Teacher's Overall Comments:

Teacher's Name & Signature:…………………………………………………………………………………….

Date: …………………………………………..

Assessment criteria for Project Work

Name of student:…………………………………………………………………………………………….

Class:…………………………………………………..

Criteria	Excellent (4)	Good (3)	Satisfactory (2)	Poor (1)
• Introduction (x 1)				
• Collection, selection and use of information (variety of sources and acknowledgement of sources) (x 2)				
• Relevancy and accuracy of content (x 2)				
• Command of subject matter (understanding of science concepts involved) (x 4)				
• Reference made to real life situations (x2)				
• Inclusion of information/materials related to the Mauritian context (x2)				
• Presentation of work (x3): ○ Structure and organization of work ○ Coherence ○ Overall presentation of work				
• Language (proper spelling, punctuation, grammar and appropriate use of scientific terminology) (x2)				
• Use of visual means of communication to support text (drawings, pictures, graphs, charts etc…) (x2)				
• Personal input – originality, creativity, critical analysis and reflection & attitudes towards the subject of study. (x3)				
• Conclusion (x2)				

Total: ……………………

Teacher's Name & Signature:……………………………………………………………………………………….

Assessment Rubric for Oral Presentation

- This is a sample rubric for teachers to assess students' oral presentations.
- This rubric is designed to be integrated into a scoring sheet.

Name of student: ………………………………………………………………………………….

Class: …………………………………..

Criteria [50 marks]	Excellent (5)	Very good (4)	Good (3)	Fair (2)	Bad (1)
Introduction of topic (×1)					
Mastery of content (×4)					
Coherency [Links and connections between ideas made clear] (×0.5)					
Voice: clarity, pace, fluency (×0.5)					
Use of visual aids (×1)					
Conclusion of topic (×1)					
Ability to answer questions (×2)					

Total: …………………………………

Teacher's Name & Signature:………………………………………………………………………………….

Assessment Rubrics for Portfolio

Name of Student: …………………………………………………………………….

Class: ………………………………..

	Formative evaluation			Summative evaluation [50]	Marks
Criteria for Portfolio	Yes	No	Needs improvement		
Good presentation				3	
A variety of artifacts has been included				4	
Elements of ICT are present				5	
A summary (main points) of lessons are included				10	
Additional notes are tied to the summary				5	
Difficulties in understanding lessons are highlighted				3	
Elements of reflection are present				5	
Issues discussed in class are included				5	
Elements of group work discussion are present				5	
Any item of extracurricular activity are discussed				5	
The formative assessment is done the months of July-August and the portfolio together with this form is returned to the student. This form has to be included in the portfolio of the student. The Summative evaluation will be carried out at the end of the third term.					

Teacher's Name & Signature:………………………………………………………………………………………….

Checklist for Homework

Homework (reading of materials prior to the lesson, problem solving, carrying out an activity, etc...) serves to reinforce work done in the class and it acts as a bridge for work done on the previous day and the following day. It is also an opportunity for the students to self assess themselves and will enable the teacher to tailor his/her next lessons so as to address conceptual difficulty.

Name of Student:…………………………………………………………………………………

Class: ………………………………….

Criteria for monitoring homework	Yes	No	Partly
The homework has been done			
The homework task has been attempted			
The task has been done correctly			
There is evidence of creativity			
Related materials have been used to attempt the task			
There is evidence of parental follow up			

The Teacher will carry out a final Assessment for homework which amounts to **10 marks**.

Teacher's Name & Signature:………………………………………………………………………………………….

Assessment criteria for Practical Work/Hands on

Name of student:………………………………………………………………………………….

Class:………………………………………………..

Assessment criteria [25 mks]	Marks
Reading of instructions prior to doing the practical - 2mks	
Proper handling of apparatus & following safety measures - 2 mk	
Correctly setting apparatus - 4 mks	
Avoiding experimental errors - 2 mks	
Following correct procedure - 3 mks	
Correctly selecting appropriate variable - 2 mks	
Good graphing skills [labelling of axes, selection of a comfortable scale, line/curve of best fit, line/curve occupies at least 50% space] - 5 mks	
Correct answer - 5 mks	

Total marks: …………………………………

Teacher's Name & Signature:………………………………………………………………………………….

6 Social Studies

Introduction

Adaptability is a key characteristic of successful individuals in a world that is constantly changing. Given the improvements in transport and communication, the changes brought about by globalisation and the growing interdependence of people, future adults must be prepared to participate effectively in those rapidly evolving contexts. Social Studies is crucially relevant in building the adolescent's sense of personal, economic, political, cultural and social identity by developing a critical understanding of how human beings, groups and institutions function. As a learning domain, Social Studies is essential to help secure a commitment to active citizenship and collective responsibility towards the betterment of society by ensuring the respect of democratic rights and commitment to sustainable development and infusion of a culture of peace.

In the elaboration of the Social Studies syllabus, consideration has been given to the introduction of certain cross cutting issues emphasized in the National curriculum.

The aims of social studies at lower secondary are to:

- ensure that students recognize the relevance of social sciences;
- engage students in discussion about events and situations that would appeal to them and develop their curiosity to learn about the past as well as the relation of the past to the present;
- provide students with opportunities to make choices about any specific content;
- make an effective use of a range of materials and techniques for retrieving and using information;
- read and interpret maps, atlases, plans and globes, documents, contemporary news and anecdotes;
- make an effective use of fieldwork: an approach which encourages students to visit and explore the environment, ask questions and engage in research and investigation;
- prepare more flexible schemes to respond to, and capitalize on children's experiences of natural events.

Assessment objectives

Social Studies will be evaluated through a number of assessment tools such as short answer tests, short essays, reading and interpreting maps, graphs and tables, document based questions and also research based project work. These assessment tools will aim to display student's learning and thinking processes rather than mere reproduction of knowledge in exam papers.

Knowledge and understanding

Students should be able to:

1. Demonstrate knowledge and understanding of appropriate historical, geographical and social topics
2. Show and demonstrate an understanding of appropriate terminologies and concepts in Social Studies.

Interpretation of evidence

Students should be able to:

1. Demonstrate the ability to use simple methods of enquiry
2. Interpret and apply relevant evidence and data
3. Show an awareness of different types and sources of evidence.

Analysis and Evaluation

Students should be able to:

1. Reach conclusions based on a reasoned consideration of available evidence
2. Organise and present evidences and arguments in a coherent and purposeful form.

Weightings:

The assessment objectives are weighted to give an indication of their relative importance. They are not intended to provide a precise statement of the number of marks allocated to particular assessment objectives.

1. Knowledge and understanding: 40%
2. Provision and interpretation of evidence: 40 %
3. Analysis and evaluation: 20%

Project work

Project work should also be used as an opportunity to demonstrate the steps involved in developing and undertaking a research work

The project should englobe cross cutting issues such as sustainable production, sustainable consumption, Peace Education, Education and Communication for Sustainable Lifestyle, Addressing HIV/AIDS

Criteria for project evaluation: (to be worked out in more detail by educators)

	Knowledge and understanding	Provision and Interpretation of evidence	Analysis & evaluation	
Identification of a problem/ an issue that can be investigated using an integrated approach	5			
Description of the problem/issue	10			
Research work: Assemble information Categorise information		20		
Presentation in a systematic and coherent manner			20	
Evidence of group work				10
Quality of language				15
Overall presentation				10
	15	20	20	45

Curriculum content

Scope of the syllabus

Though the scope of the syllabus if wide, teachers are encourages to develop their own focus with references to their students' areas of interest, though keeping in mind an approach that integrated the three areas of learning, as well as certain cross cutting issues around which the work of students can be centered.

Form I: Year 1

Students at Form I level will be provided with a range of knowledge and understanding from historical, geographical and sociological perspectives in areas as diverse as maps skills, evolution of civilizations, the beginning of the modern world, physical features of their environment, and the social and economic changes that characterizes the republic of Mauritius.

AREAS OF LEARNING Key Themes	HISTORY	GEOGRAPHY	SOCIOLOGY
Maps skills	Location of ancient civilizations on a world map	Location of specific places and features (e.g. continents, oceans, countries, major cities, rivers, mountain ranges.). Reading and interpretation of maps	
Evolution of civilisations:	**Ancient Civilization** • Situating the ancient civilization on a time line; • Organisation of society in the ancient times.	• locating ancient civilizations on a world map;	**From ancient to modern times** • Society from ancient to modern time • Family – from ancient to modern time • Family among different civilizations

AREAS OF LEARNING	HISTORY	GEOGRAPHY	SOCIOLOGY
Key Themes			
Beginning of the Modern World	**Renaissance & Voyages-Discoveries** • Major developments during the Renaissance period. • Importance of the discovery of maritime routes to the east. • Contribution of the main explorers. **Pre-colonial Indian Ocean** • Arab activities on the east coast of Africa. • Migration in Indian Ocean from South East Asia to Madagascar. • Cultural impact of migration.	Geographical aspects of Indian Ocean	Society during the Renaissance period
Physical Relief Features		**The study of the earth: The four spheres**. • Atmosphere, Lithosphere, Hydrosphere and Biosphere. • Major characteristics of each sphere. **The Formation of Mascarene Islands:**	Examples of the social consequences of environmental decay- eg: consequences of flooding on family life, economic life and general , health. Deviant behaviours that threaten local and global environment

AREAS OF LEARNING	HISTORY	GEOGRAPHY	SOCIOLOGY
Key Themes			
		• The role of vulcanicity in the formation of Mauritius, Reunion and Rodrigues. • Stages in the formation of Mauritius and Rodrigues.	
Social and Economic Changes	Social and Economic life in the past.	**Changes in Land Use in Mauritius** • Changes in agricultural land use. • Land use today • Major developments in urban and rural areas.	• Changes in rural and urban areas and this consequences on the family. • Population change and its consequences • Dealing with change • Contribution of the family to the wellbeing of the individual and society at large.

Form II: Year 2

At Form II level, emphasis on a range of kno0wledge and understanding from the historical, geographical and sociological perspectives will continue. Areas that will be addressed will include: the Indian Ocean, the environment, concerns and challenges of the environment as well as developing a responsible attitude towards the environment.

AREAS OF LEARNING **Key Themes**	HISTORY	GEOGRAPHY	SOCIOLOGY
The Europeans in the Indian Ocean	• Setting up of East India Company in Europe for trade in the Indian Ocean • Creation of trading posts by the Europeans in the Indian Ocean • Social and Economic conditions in Ile de France in the 17th and 18th century. • The French Revolution and its impact on Ile de France • End of French Rule in Ile de France	**Maps skills** Location of Europe, and European colonies	Social and Economic conditions of Mauritius in the 17th and 18th century.
Understanding our Environment		• Weather and Climate. • Use and purpose of weather instruments. • Factors affecting temperature and rainfall in the Mascarene	• Consequences of rapid climate change and global warming • Social adjustment to rapid climate change- from ancient to modern

AREAS OF LEARNING	HISTORY	GEOGRAPHY	SOCIOLOGY
Key Themes			
		region. • Climatic graphs of the islands (Mauritius, Reunion and Rodrigues). • Distribution of the world's climatic types.	times
Concerns and challenges of the environment	• Deforestation during the Dutch period • Forest laws during the French period	• Importance of fauna and flora in Mauritius. • How and why fauna and flora are threatened in Mauritius. • Policies of conservation of flora and fauna. • Impact of deforestation (including Madagascar). • Impact of global warming.	• Social consequences of environmental decay. • Social responsibility towards the environment
Industralisation	Beginning of Industrial revolujtion	• Types of industries in Mauritius. • The locations of industries. • Role of these industries in diversifying our economic base.	Social consequences of industralisation: impact on the family.

AREAS OF LEARNING	HISTORY	GEOGRAPHY	SOCIOLOGY

AREAS OF LEARNING Key Themes	HISTORY	GEOGRAPHY	SOCIOLOGY
Modern institutions and the media		**Role of media in developing consciousness on environmental issues: eg: National Geography and other media resources**	- Different types of media through the ages - Functions of media. - Impact of media on the individual and society. - Ethical issues in the use of media. - Legal implications of misuse of the media.

AREAS OF LEARNING	HISTORY	GEOGRAPHY	SOCIOLOGY

Form III: Year 3

At Form II level, emphasis on a range of knowledge and understanding from a historical, geographical and sociological perspectives will continue. Areas that will be addressed will include: the European in the Indian Ocean, the world in the 20[Th] Century, contemporary environmental issues, role of education, problem of deviance and developing a responsible citizenship.

AREAS OF LEARNING Key Themes	HISTORY	GEOGRAPHY	SOCIOLOGY
The European in the Indian Ocean	• The Anglo-French rivalry in the Indian Ocean and the role of Mauritius. • British conquest of Mauritius and the transition from French to British administration. • Social and Economic life in the 19th century Mauritius. • Life in Independent Mauritius		• Social and Economic life in the 19th Century Mauritius • Social life after independence
The world in the 20th Century	• World Wars • Peace and Conflict an the role of international organisations	• Travel and Tourism • Mauritius in the modern • The geography of tourism in Mauritius. • The different types of tourism in Mauritius and Rodrigues.	• Positive and negative impacts of tourism. • Conditions for making tourism sustainable.

AREAS OF LEARNING	HISTORY	GEOGRAPHY	SOCIOLOGY
Key Themes			
Contemporary environmental concerns and hazards		**Environmental Concerns** • The extent of global warming. • Human-induced causes and consequences of global warming. • Measures to reduce the impact of global warming. • Greenhouse gas emission and proposed controls. • Tropical cyclones as a major hazard for Mauritius and Rodrigues. • Volcanoes and earthquakes- the internal forces of the movement of plates. • Earthquakes and tsunamis as natural hazards.	Social consequences of environmental hazards New hazards; HIV AIDS; Drug addiction.
The Role of Education	Development of Education in Mauritius and the world		• Importance of education in the world today. • Educational opportunities in Mauritius. • Factors affecting achievement.

AREAS OF LEARNING Key Themes	HISTORY	GEOGRAPHY	SOCIOLOGY
Deviance and responsible citizenship	Brief historical review of destabilizing factors globally		**Deviance and Crime in Society** - Deviance, delinquency and crime. - Consequences of deviance in the day to day life of the individual and on society at large. **Developing Responsible Citizenship**. - Perceptions of responsible citizenship. - Developing notions of responsible citizenship.

Additional notes to Educators

Evaluation in Social Studies

The Social Studies Syllabus is not intended as a set of rigid knowledge to be learnt by heart. The topics and content should be used as indicative materials and areas of study, keeping in view the assessment objectives. While each school will have the freedom to choose their area of emphasis, they must ensure exposure to the other areas of the syllabus covering at least 50% of the materials, more so through the project work, where the emphasis will not be on rote learning, but an informed interaction with the materials and content of the syllabus. It is therefore necessary for teachers to encourage students to concentrate their learning to areas that are most appealing as the main focal concern. Educators should then intelligently integrate other related areas of learning so as to extend the learning objectives of the students.

It is also proposed that much greater emphasis is placed on project approach. While students should be free to choose an area of research, it is advisable to get different groups to select a different theme, keeping in mind the cross cutting issues outlined above. It is envisaged that the school provides opportunity for all the classes to get access to the work of the other so that there

is ultimately a sharing that enriches the whole school. It is therefore necessary that students are made to visit the work of the other classes as well as get an opportunity to discuss and are exposed to the research and findings of each other.

Additional hints on assessment in Social Studies

Feedback on student learning and student opinion is a critically important feature of Social Studies instruction. Evaluation standards reflect your goals and set levels for student performance. In their teaching educators must make decisions about student progress and their attitudes. Evaluation is the organized way which will enable the educators to gather and interpret evidence to decide how well or how poorly the students are meeting the objectives that have been set for them.

Assessment in Social Studies can be carried out in a number of ways. Students may be asked to produce different kinds of work, written, drawn, acted, and spoken, which they will add to an ongoing "portfolio" of production that the educator can evaluate as the semester moves along and at its conclusion.

1. **Multiple   Choice**.

   Multiple choice items are among the most flexible of test formats and, contrary to popular opinion, can be used to measure virtually every level of didactic and reflective thought. The types of multiple choice questions posed to students depend on the goals and skills as an item writer. Multiple choice items need not be limited to assessing student knowledge, but can easily be adapted to measure reflective and affective goals, such as application, analysis, synthesis, and judgment.

2. **True-False**

   True-false items usually take the form of a series of statements that students must evaluate as either correct or incorrect. Statements are almost always factual in nature, formulated on the assumption that the knowledge described has been properly validated and is not open to question.

3. **Matching**

   Matching items seek mainly recall of information, but they can demand a slightly higher level of thinking from students by emphasizing elimination strategies. To work well, the matching list should not be overly long and should hold to the same categories on both sides or columns of information. The overall difficulty level may be increased by offering a longer list of matching items or by presenting some that are indirectly rather than directly related to each other

4. **Short – Answer Tests.**

   Paper-and-pencil tests are designed primarily to assess students' recall of information skills. Published, standardized tests are often given only at the conclusion of a lengthy

sequence of instruction, but they can and should be used on a pretest-posttest basis, as well as to provide for comparisons over time. **Document Based Questions**

5. Document-Based Questions

Document- or evidence-based questions (DBQs) seek to assess students' reflective skills and reasoning ability. DBQs are designed to promote the largely cognitive skills of application, analysis, and synthesis for both convergent and divergent problem solving. Questions that ask students to deal with reading documents and viewing art and artifacts require problem-solving strategies. A DBQ cannot be answered on the basis of knowledge alone, although some knowledge may be very useful for understanding definitions and interpreting clues. Each DBQ provides or is drawn from information presented on the examination; this may consist of a historical document, quotation, graph, chart, photograph, painting, song, or research report.
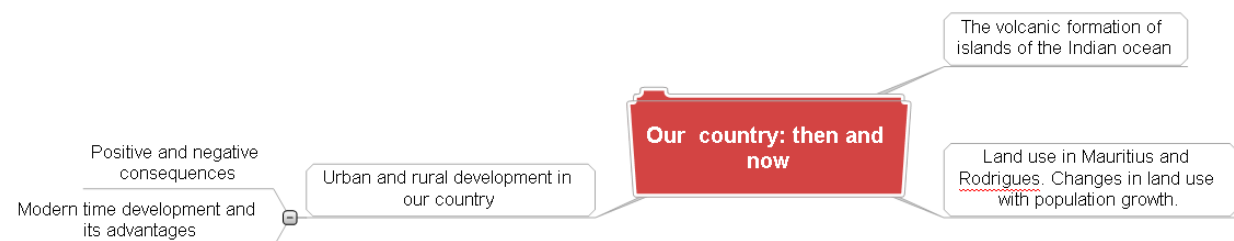
Reading and interpretation of geographical data from maps charts , graphs , pictures and tables will enable to assess not only the content knowledge but also the reasoning and logical thinking skills.

6. Portfolios and project work

Portfolios in Social Studies might include notes, reflective writing, arguments and essays, peer reviews, videotapes, photographs, paintings and drawings, musical or audio tapes, descriptions, rough drafts of unfinished work, diagrams, graphs, and charts, group products, and computer-generated materials.

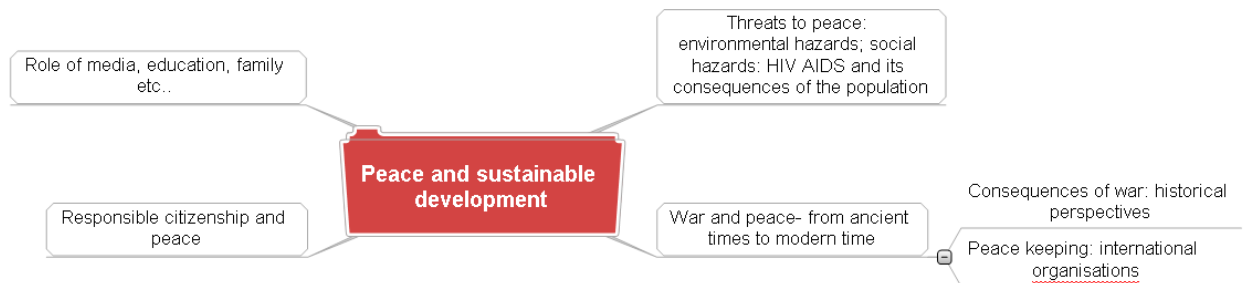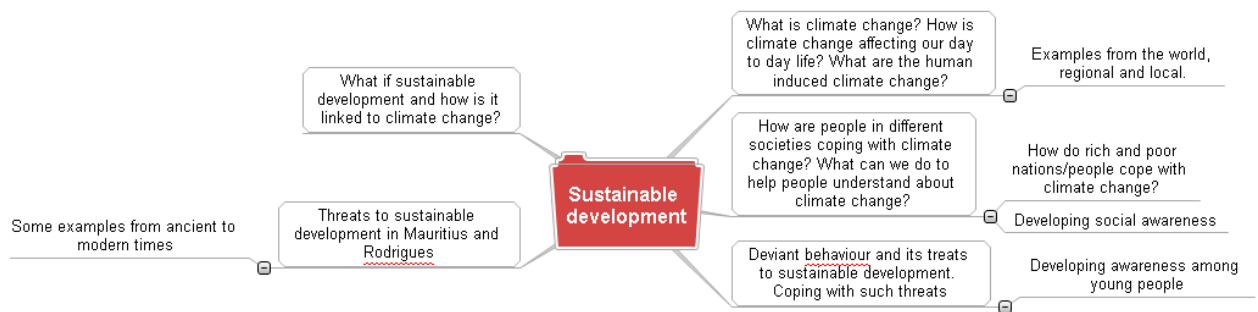*Examples of integration of teaching and learning around a theme*

Form I:

Form II:

The environment

- Developing responsible behaviours
- Dangerous social practices
- Environmental hazards today
- Examples of environmental hazards world wide
- Challenges to the environment
  - Examples form ancient time to modern days

Form III:

Sustainable development

- What if sustainable development and how is it linked to climate change?
- Threats to sustainable development in Mauritius and Rodrigues
  - Some examples from ancient to modern times
- What is climate change? How is climate change affecting our day to day life? What are the human induced climate change?
  - Examples from the world, regional and local.
- How are people in different societies coping with climate change? What can we do to help people understand about climate change?
  - How do rich and poor nations/people cope with climate change?
  - Developing social awareness
- Deviant behaviour and its treats to sustainable development. Coping with such threats
  - Developing awareness among young people

Peace and sustainable development

- Role of media, education, family etc..
- Responsible citizenship and peace
- Threats to peace: environmental hazards; social hazards: HIV AIDS and its consequences of the population
- War and peace- from ancient times to modern time
  - Consequences of war: historical perspectives
  - Peace keeping: international organisations

7 Design and Technology

It is acknowledged that the world has now been transformed into a global village. For any emerging nation to survive, it has to resort to different technologies.

Design and Technology, in our lower secondary curriculum, equips our youth with the necessary tools so that they make sense of the changing world and integrate the society as responsible citizens. It is an area of learning which allows students to apply knowledge, skills, experience and resources to design and thus develop technological solutions in order to cater for the needs of individuals, societies and environments.

Design and Technology enables students to become creative, innovative and reflective individuals as they select materials, information systems and processes to devise sustainable solutions for an improved quality of life.

The aims of Design and Technology at lower secondary are:

- To develop awareness of the design process.
- To develop knowledge and skills to solve simple design problems.
- To develop knowledge of a range of materials and associated manipulative skills.
- To develop an understanding of basic technological processes and control systems.
- To develop a range of communication skills, including the use of models.
- To develop awareness of safety and health associated with technological activities.
- To develop an awareness of the inter-relationship between technology, society and the environment.
- To promote aesthetic appreciation and values related to design.
- To stimulate the development of curiosity, enquiry, initiative, ingenuity and resourcefulness.

Assessment Objectives

The following objectives are presented as a reference against which the assessment will be made.

A student should be able to:

- Identify the stages of the design process.
- Use the design process to solve design problems.
- Identify a range of materials, their properties and uses.

- Process a range of materials for the making of artefacts.

- Demonstrate knowledge of basic control systems.

- Apply basic control systems to solve design problems.

- Use a range of techniques to communicate design ideas.

- Apply safety and health knowledge in relation to tools, techniques and processes.

- Show the interplay between design, technology, the environment and culture.

- Demonstrate an awareness of aesthetics in design solutions.

- Display creativity, ingenuity, resourcefulness, attitudes of cooperation, social responsibility and entrepreneurial skills in design work.

Weightings

The following weightings give an indication of the relative importance of the assessment objectives:

- Knowledge and Understanding: 30%

- Design Analysis, Idea Generation, Synthesis and Evaluation: 40%

- Practical Application: 30%

Curriculum content

Form I: Year I

Materials

- Common materials in use in the environment.
- Properties and uses of materials.
- Safe use of materials for the making of artefacts.

Technological Processes and Skills

- Basic bench tools used in materials processing.
- Safe work practices in the processing of materials and artefacts.

Presentation of information

- Pictorial projection: Oblique and Isometric Projections.
- An introduction to freehand sketching.
- Rendering techniques to enhance presentation.
- An introduction to Orthographic Projection.

- Simple model-making to present information

Systems and Design

- The design process.
- Application of the design process to solve simple problems.

Realisation

The use of materials, processes and techniques in the making of simple artefacts.

Design, Technology and Society

- The importance of design in society.
- The effects of technology in our everyday life.

Technological Principles

- Basic mechanisms in common use.
- Functions of common mechanisms.
- Basic mechanisms in simple machines and equipment.

Form II: Year II

Materials

- Classification of materials according to their nature and properties.
- Comparison of the properties of various materials.
- Safe use of materials for the realisation of products.

Technological Processes and Skills

- Basic processes for shaping materials.
- Use of basic hand tools for shaping materials and realisation of artefacts.

Presentation of Information

- Pictorial Projections: Planometric Projection and One-Point Perspective.
- Presentation of information using charts, graphs, signs and symbols.
- Orthographic Projection.
- The use of sketches and models to present ideas and information.

Systems and Design

- Application of the design process to solve problems related to products and systems.

Realisation

- The combination, assembly and joining of materials using appropriate techniques safely.

Design, Technology and Society

- The interplay of design and technology with our value system and culture.

Technological Principles

- Types of structures.
- Importance of structures in everyday life.
- Model making of simple structures.

Form III: Year III

Materials

- Simple testing of materials.
- Recording of data from tests on materials.
- Use of materials in simple project work.

Technological Processes and Skills

- The use of tools and techniques for shaping materials.
- Finishes on materials and artefacts.

Presentation of Information

- Presentation of information in 2D and 3D modes.
- Freehand sketching.
- Production of accurate drawings by using scales, appropriate conventions and standards.
- Rendering techniques to enhance presentation of information.

Systems and Design

- The application of the concepts of input, process and output to the solutions of problems.

Realisation

- The safe use of appropriate techniques to realise solutions in 2D and 3D modes.

Design, Technology and Society

The interplay between design, technology, cultural change, fashion, values, materials utilisation, leisure and work.

Technological Principles

- Basic electrical and electronic components.
- Functions of basic electrical and electronic components.
- The use of basic electrical and electronic components in the design and realisation of artefacts.

Additional Notes to Educators

- Students must be encouraged to work on a variety of tasks as they investigate, communicate, create and use appropriate technologies to solve problems. The tasks should involve the processing of wood, metal and plastics and non-resistant materials.
- Teachers must organise activities where students are given the opportunity to observe, select and apply good practices. Demonstrations, visits to appropriate institutions and industries should be included to make the concepts and principles in Design and Technology more meaningful.
- Opportunities for learning should be related to the students' experience and ways of thinking. Students' individual needs should be at the centre of any teaching-learning activity. Students should therefore be allowed the freedom to relate the design process to their own abilities so as to solve problems in order to satisfy specific needs. Design projects undertaken by students should be from real life situations and experiences.
- At all times, teachers should stress the importance of health and safety in the school workshop.

- The very nature of Design and Technology; for instance, open-endedness, creativity and independence of thinking, necessarily means that a careful, holistic and user friendly approach to assessment is needed in this area of learning.

- Assessment of learning needs to focus on student's development, adaptation and application of a wide range of skills to solve problems.

- Assessment modes should include examinations, keeping of log and journals, portfolios, interviews, observations, together with student interaction with the learning environment.

- It is imperative that teachers from the very start encourage students to produce and keep portfolios of their work.

- Clear guidance and criteria should be established and made explicit to the students in the assessment of tasks in Design and Technology.

8 Home Economics

Introduction

Home Economics is an interdisciplinary subject drawing on the fields of nutrition and dietetics, textiles, fashion and design, human development, relationships and behaviour. Al lower secondary level, the subject consists of three strands (Human Development and Family; Food and Nutrition; Design, Clothing and Textiles) to provide opportunities for adolescents to develop a unique repertoire of knowledge, practices and dispositions that will assist them in meeting the challenges of everyday life in our evolving society.

Given the multidisciplinary nature of Home Economics, the present syllabus addresses two domains of learning of the National Curriculum Framework Secondary:

- **Health and Physical Education** - *Human Development & Family and Food & Nutrition strands.*
- **Technology II** – *Design, Clothing and Textiles strand.*

Home Economics has evolved over the past few decades; it is no longer characterized as women's knowledge for the private domain of the home. With improved living standards, changing patterns and roles in the family and in the world of work and globalisation, the focus has broadened. Home Economics education nowadays is concerned with promoting the development of skills to identify needs and wants as well as to manage available resources effectively and efficiently. It should, therefore, be offered to all adolescents in the lower secondary, irrespective of gender**.** This will also assist in achieving gender equity in the secondary school curriculum, in line with recommendations of the current educational reform.

The present lower secondary syllabus has been worked out to make room for the implementation of the subject even in schools which do not have any specialist room. In order to ensure effective teaching and optimal learning of Home Economics at lower secondary level, two consecutive periods should be allocated for practical classes and another two periods for theory classes. Moreover, for safety reasons, practical classes should be split. The syllabus is geared towards striking the right balance between theoretical understanding and their practical application to everyday situations related to human development and family, food and nutrition, design, clothing and textiles.

The aims of Home Economics at lower secondary are to:

- Provide opportunities to acquire knowledge and develop understanding of facts, concepts, principles and terminology associated with health, nutrition, materials, resources, individuals, and families.
- Develop in students practical and organizational skills and creative abilities.
- Develop in students skills of reasoning and deduction through practical investigation.
- Engage students in technology practice to develop products and processes that meet the needs of individuals and families and that reflect imagination, originality and aesthetic judgement.
- Develop in students skills in handling and interpreting information relevant to Home Economics.
- Help students to make informed, responsible and ethical decisions and take action in order to promote personal, family and community well-being.
- Provide opportunities for students to investigate issues of personal and societal significance.
- Develop in students a range of interpersonal, verbal and nonverbal skills to meet personal and family needs.

Assessment objectives

Home Economics will be evaluated through a range of assessment strategies that can include class tests, written exam, practical exam, course work and project work. Different strategies should be selected to assess knowledge, understanding, higher order cognitive skills as well as practical skills.

The specific assessment objectives are:

Knowledge and Understanding

Students should be able to:

1. Demonstrate an understanding of facts, concepts, principles and terminology associated with health, nutrition, materials, resources, individuals, and families.

Higher Order Cognitive Skills

Students should be able to:

1. Handle and interpret information relevant to Home Economics.
2. Use skills of reasoning and deduction in investigative and project work.
3. Make informed, responsible and ethical decisions and take action in order to promote personal, family and community well-being

Practical Skills

Students should be able to:

1. Demonstrate practical and organizational skills by developing products and practising processes that reflect imagination, originality, aesthetic judgement, and efficient use of technology.

Weightings

The weightings for the assessment objectives are as follows:

	Forms I & II	Form III
1. Knowledge and understanding:	40%	25%
2. Higher order cognitive skills:	30%	35%
3. Practical skills:	30%	40%

Curriculum content

The content for Home Economics at lower secondary level has been organised around three strands:

- Human Development and Family

- Food and Nutrition

- Design, Clothing and Textiles

Human Development and Family

- **Family**
  o The Family Unit
  o Role of family in the society
  o Types of families in Mauritius
  o Establishing positive relationships at home and at school
- **Growing Up**
  o The Human Life Span
  o Physical changes during puberty
  o Habits for healthful growth
  o Personal development
- **First Aid and Hygiene**
  o Personal hygiene
  o Good grooming
  o First Aid (cuts & wounds) and First Aid kit
  o Safety rules at school and at home
- **Resources Management**
  o Human and non-human resources
- **Consumer Education**
  o Understanding consumer rights and responsibilities
  o Factors affecting consumer decisions
  o Reading labels

Food and Nutrition

- **Nutrients and Food Commodities**
  o Importance of food
  o Macronutrients: Sources and importance
  o Dietary fibre: Sources and importance
- **Meal Planning and Food Choice**
  o The three food groups
  o Balanced meal
  o Main factors influencing food intake
- **Diet-related Diseases**
  o Excessive and/or deficient consumption of macronutrients and dietary fibre
- **Food and Kitchen Safety**
  o Safety hazards in the kitchen
  o Precautions to ensure safety in the kitchen
- **Food Management**
  o Basic kitchen utensils and equipment
  o Weight and measures
  o Kitchen linen
  o Basic culinary skills
  o Cooking food – importance and methods
  o Reading recipes
  o Food preparation practicals

Design, Clothing and Textiles

- **Fibres and Fabrics**
  - Classification of natural textile fibres
  - Study of natural plant fibres – Cotton and Linen
  - Basic fabric manufacture
- **Clothes and Styles**
  - Protective clothing
- **Sewing Equipment**
  - Basic sewing equipment – Use, care and functions
  - Sewing Kit
  - Safety measures to avoid common accidents when using these equipment
- **Textile Applications**
  - Basic sewing stitches
  - Plain seam
  - Working creatively with fabric – Construction and decoration of textile items

Form II: Year 2

Human Development and Family

The Family:
- The Family as a caring Unit
- Rights & responsibilities within families

Growing Up
- Importance of healthy habits during adolescence
- Changes during adolescence
- Peer pressure

First Aid and Hygiene
- First aid (sprains, fractures, burns)
- Caring for my environment
- Waste disposal

Resource Management
- Time management
- Money management

Consumer Education
- Types of advertising
- Advantages and disadvantages of advertising

Food and Nutrition

Nutrients and Food Commodities
- Water: Sources and importance
- Vitamins: Sources and importance
- Minerals: Sources and importance
- Milk & milk products
- Fruits & vegetables

Meal Planning and Food Choice
- Guidelines for healthy eating/Dietary guidelines
- Balanced diet and balanced meals
- Importance of main meals and healthy snacking
- Meal planning

Diet-related Diseases
- Excessive & deficient consumption of selected vitamins and minerals.
- Benefits of healthy eating in the prevention of diet- related diseases

Food and Kitchen Safety
- Food spoilage
- Food poisoning

Food Management
- Kitchen utensils & equipment
- Culinary skills
- Principles of food safety
- Methods of cooking
- Food preparation practicals

Design, Clothing and Textiles

Fibres & Fabrics
- Classification of textile fibres
- Study of natural animal fibres- Wool and Silk

Clothes and Styles
- Basic clothes styles
- Style features
- Fabric designs

Sewing Equipment
- Sewing equipment – Use, care and functions
- Safety measures to avoid common accidents when using sewing equipment

Textile Applications
- Taking and using body measurements
- Basic pattern drafting
o Working creatively with fabrics: Construction and decoration of textile items

Form III: Year 3

Human Development and Family

- **Family**
  - Family Relationship
  - Family Needs
  - Coping with family issues
  - Table Manners and Etiquettes
- **The Emerging Adult**
  - Conflict Management
  - Early Sexual activity
  - Teenage pregnancy
  - HIV/AIDS and Other Sexually transmitted infections
- **First Aid and Hygiene**
  - Infectious diseases and preventive measures
- **Resources Management**
  - Energy management
  - Decision making skills
- **Consumer Education**
  - Analysing advertising claims

Food and Nutrition

- **Nutrients and Food Commodities**
  - Saturated fats and Unsaturated fats
  - Cholesterol
  - Recommended energy and nutrient intake for adolescents.
  - Importance and common uses of: Egg, meat, fish, cereals ,pulses and nuts
- **Meal Planning and Food Choice**
  - Food choice and eating habits
  - Eating out
  - Convenience foods
  - Food security and our staple foods.
  - Nutritional analysis of dishes and meals.
- **Diet-related Diseases**
  - Non communicable diseases(obesity, diabetes, cardiovascular diseases)
  - Eating disorders
- **Food and Kitchen Safety**
  - Food preservation
  - Food additives
  - Interpreting Food labels
- **Food Management**
  - Labour saving devices
  - Introduction to design in food product development
  - Recipe modification
  - Sensory evaluation of dishes
  - Food preparation practicals

Design, Clothing and Textiles

- **Fibres and Fabrics**
  - Classification of man- made textile fibres
  - Study of ma- made fibres
  - Textiles terminologies.
- **Clothes and Styles**
  - Ethnic styles of clothing in Mauritius
  - Choice of clothes
  - Wardrobe planning
  - The care of clothing
- **Sewing Equipment**
  - Electric sewing machines: use ,care and function
  - Steam iron: use, care and function
  - Safety measures to avoid common accidents when using these equipment
- **Textile Applications**
  - Introduction to basic fashion design
  - Body measurements
  - Pattern drafting and Pattern adaptation/alteration.
  - Working creatively with fabrics –construction and decoration of textile items

Additional notes to Educators

Home Economics educators are responsible for creating conducive learning environments. A learner-centred approach will provide opportunities for students to practise critical and creative thinking, problem solving and decision making skills. The educator can be a facilitator, a resource person as well as a fellow-learner, as learning is an ongoing process. Moreover, a learner-centred approach will help the students to develop conceptual understandings related to food and nutrition, human development and family as well as design, clothing and textiles.

A variety of teaching strategies can help to cater for the different learning styles of all learners. In order to achieve this, students must have the opportunity to co-operatively brainstorm, discuss, evaluate information, and make informed decisions. Teachers will be ultimately responsible for determining the best teaching methods (for both theory & practical classes), the best way of grouping students, and the best way to deliver the lessons. They have the flexibility to adapt the different learning strategies to the learners' needs in order to make learning meaningful and captivating.

Table 1. Suggested Teaching Strategies

Direct Instruction	Expository/Lectures
Indirect Instruction	Inquiry, problem solving, decision making and discovery.
Interactive Instruction	Class discussion, brainstorming sessions, mind-mapping, peer teaching, group work, demonstration
Independent Study	Research, project work, assignments, coursework.

The use of different teaching strategies (see Table 1) will help to cater for students' varying learning needs. It will also help to achieve the aims of Home Economics at lower secondary level..

Modes of Evaluation

Assessment and evaluation are integral parts of the teaching and learning process. Meaningful learning involves reflection, construction and self-evaluation. Evaluation may take different forms depending on its purpose. Diagnostic evaluation will identify individual problems and suggest appropriate corrective action. Formative evaluation should be used to monitor progress and to make necessary adjustments in instructional strategies while summative evaluation should be used at the end of a particular instructional unit.

Given the nature of the subject, both theoretical understanding and their practical applications should be evaluated, using a variety of techniques. The different techniques that can be used are:

- Teacher observation
- Oral questioning
- Written tests/exams
- Group work [posters, charts, experiments]
- Role Play
- Practical work/coursework
- Projects and reports
- Students self-evaluation
- Oral presentations

Educators are encouraged to develop assessment tasks that address cross cutting issues such as HIV/AIDS, Values Education, Peace Education, and Education for Sustainable Lifestyle. Two examples are provided as a guide on the next two pages.

Modes of Evaluation

**TASK: Role play on safe and unsafe food handling practices (*in groups of 4-5 students)*

LEVEL: Form II

ASSESMENT RUBRIC:

Criteria	Knowledge and understanding	Higher order cognitive skills	Practical skills	Other skills
Relevance of arguments and script: - Handle and interpret information correctly - Make informed and responsible decisions		25		
Quality of dialogues (clarity, fluency, convincing, factually correct)	15			
Demonstration of safe and unsafe food handling practices			25	
Focus and smooth flow of role-play (organisational skills)			10	
Individual contribution towards conception and implementation of the role play and ability to work as a group (based on log book).				10
Quality of Information in log book (including reflections on role play).	5	10		
	20	35	35	10

TASK: A Project work on a Textile item (Utility holder/ Wall hanger / Drawstring bag)

LEVEL: Form III

ASSESSMENT RUBRIC:

	Knowledge and understanding	Higher order cognitive skills	Practical skills
Research work on the theme	10		
Design Process: - Generation and development of ideas	10		
Workmanship / Skill in working the item - Construction and decoration of textile item			20
Demonstrates the implementation of an integrated approach		25	
Shows creativity			10
Colour scheme/ aesthetic			10
Overall presentation & appearance			5
Self /Peer evaluation of end product		10	
	20	35	45

This Design, Clothing and Textiles project work involves cognitive, manipulative and affective skills, where students will work on a project they researched, designed and constructed. It uses an integrated approach, addressing cross-cutting issues like sustainable lifestyle and HIV/AIDS.

Students can research on the theme HIV/AIDS, come up with a slogan to fight and prevent HIV/AIDS which they should include in their textile item. They can work on any of the above textile item or an item of their choice, designing, constructing and decorating it using techniques like fabric collage, appliqué, stencil/vegetable printing, embroidery stitches, beadwork and sequins.

Students are encouraged to use old clothes or scrap fabrics to make the item and/or decorate the item, in line with the three R's (Reuse, Recycle and Reduce).

The making of this textile item will:

- engage students to participate in campaigns against HIV/AIDS and disseminate information.
- encourage the reuse of textile/fabric waste effectively to reduce pollution and initiate them to simple activities to manage waste in their immediate environment.
- develop students' creative skill through the designing, construction and decoration of the textile item.

9 Physical Education

The impact of the high rate of obesity and Non-Communicable Diseases on the national productivity and expenses on health urges Mauritius to aim at developing a healthier and more efficient workforce to be able to survive in an aggressive and highly competitive international economic environment. The Health and Physical Education syllabus has been designed to equip the younger generation with the knowledge, skills and attitude that will help them engage in healthy and sustainable physical activity. It will also help them contribute in the well being of their community , the environment and the society at large as emphasized in the National Curriculum framework.

The aims of Physical Education at lower secondary are to:

- Ensure that students understand the different stages of their physical, social and emotional growth.
- Empower students to manage and adapt to the changes and take the responsibility of their health and fitness.
- Develop a range of general and specific movement and motor skills related to different games and activities.
- Students use safe practices and assess the risks involved in handling of equipment and apparatus in sports and physical education.
- Develop a range of positive values such as team spirit, cooperation, respect for others, discipline and responsibility.
- Develop interpersonal skills and to accept differences in ability, gender, race, religion and culture.
- Inform students of their rights and responsibilities on and off the play field.

Assessment Objectives

Students will be assessed under the following objectives:

1. **Knowledge and understanding of:**
- information and literature in Physical Education;
- factors affecting performance, physical activity and health;
- safety aspects and risks associated with participation in physical activity;
- reasons for participation in physical activity and leisure.

2. **Ability to :**

- learn and perform skills related to physical activities and games;

- display positive attitudes towards physical activity and leisure;

- participate in the activities according to the rules of each game;

- develop a range of positive values and the knowledge of their rights and responsibilities.

-

Component 1 will be assessed through written paper(s) and Component 2 through coursework.

The grid below shows the weighting of the assessment objectives in the two components:

Form	Assessment Objective	Component /weightage		Duration of written paper (Maximum)
		Component 1 Written Paper(s)	Component 2 Coursework	
Form I	1.	20 %	_	1 hour
	2.	_	80 %	
Form II	1.	30 %	_	1 hour 30 mins
	2.	_	70 %	
Form III	1.	40 %	_	1 hour 30 mins
	2.	_	60 %	

Component 1 : Written Paper

The written examination in Form I Form II and Form III can be carried out at the end of year as one single written paper or at the end of the second (2nd) term and third (3rd) term. The weighting for each term will be decided by the Head of the Physical Education Department, however the total should equal to the percentage indicated for that level.

Eg: Written Paper - Form II

1st Term - No examination

2nd Term –   10 %

3rd Term –   20 %

Total   –   **30 %**

Component 2 : Coursework

The assessment for Component 2 will be divided into smaller parts and carried out during the three school terms. Marks from all the component parts will be added to get the final mark of the student for the year. The total marks for the year should equal to the percentage for that level.

The Health and Physical Education syllabus will have two components:

1. *Knowledge and Understanding*
2. *Practical skills*

Component 1: Knowledge and Understanding

In this section the different topics for each year have been identified and distributed so that students improve their knowledge, understanding and interpretation of information and literature in Physical education.

Curriculum content

Form I- Year 1

1. Skill Learning

Simple information processing model: what is meant by the terms input, decision making, output, feedback.

How you learn a new skill:

When you first do movement it goes into short term memory.

Practice – movement goes into long term memory.

2. Physique and Body Image

Understand the term physique.

• Three extreme body types

Obesity, causes and effects.

The effect of physical activity and exercise on obesity, and the prevention of obesity.

3. Safe Practices in Games and Physical Activity

Participants need to be aware of;

° the correct clothing and safety equipment to be used,

° how to check and handle equipment,

° safety arrangements,

° how to assist and support other pupils,

° adhere to a code of behaviour,

° the need to warm up and cool down after exercise.

Safety rules and regulations. These will differ from activity to activity.

Form II- Year 2

1. Skeleton and joints

The four major functions of the skeleton:

- shape and support

- movement

- protection

- blood production.

Examples of major bones of the body to highlight these functions

2. Muscles and tendons

The role and function of muscles and tendons during movement: Major groups of muscles and their type.

- pectorals

- biceps

- triceps

- abdominals

- quadriceps

- hamstrings

3. Healthy Lifestyle

Simple definition of health.

- World Health Organisation (WHO) definition – a state of complete physical, mental and social well-being.

- Physical well-being;

- all body systems work well,

- free from injuries and illnesses,

- able to carry out everyday physical tasks

- Values, Fair play, sportsmanship, respect as part of the social well being.

- need for a healthy lifestyle and regular exercise,

4. Posture
Definition of posture
Types of good posture
Importance of good posture

5. Injuries

- Prevention of some injuries can be possible if the participant

- warms up and cools down correctly,

- uses the correct equipment,

- knows the rules and regulations,

6. Leisure and recreation

- Leisure time – the free time a person has when not working or sleeping.

- Importance of leisure and recreation.

7. Global events

- Identify global sports events e.g. Olympic Games, Football World Cup. Background information on these events.

Form III- Year 3

1. Motivation

- Meaning of motivation

- Types of motivation:

- Intrinsic and extrinsic

- Rewards and incentives

- Arousal and performance; how one is affected by the other

- Need for relaxation and visualisation.

2. Circulatory and respiratory systems

- Components of blood and the functions of plasma, red cells, white cells, platelets.

- How activity and exercise develop and affect the efficiency of the circulatory and respiratory systems:

- Stronger heart muscle

- Increased stroke volume and cardiac output

- Lower resting heart rate

3. Fitness

- Simple definition of fitness.

- Components of fitness;

- Health related fitness:

- Skill related fitness:

- Factors which affect fitness.

4. Injuries

- Causes of injuries;

- RICE (Rest + Ice + Compression + Elevation)

5. Posture
- Causes of poor posture
- Common postural deformities

- Prevention of poor posture
- Physical activity and posture

6. Smoking and Alcohol

- Smoking; dangers and the long term effects.

- Alcohol; dangers and the long term effects

- Effects of smoking and alcohol on physical fitness and activity.

7. Global events and History of Sports

- Identify global sports events e.g. Olympic Games, Football World Cup. Brief history and background information on these events.

- Identify certain countries and the sports they excel in.

Component 2: Practical Skills

In this section of the syllabus the activities have been clustered in three categories. Depending on the resources available schools will choose a minimum of one (1) activity from each category. A maximum of six (6) activities can be taught per year.

General and specific warm up, stretching, cool down and good practices should be part of all activities / events taught in all categories.

Category	Activities
Team Games	1. Basketball 2. Football 3. Handball 4. Volleyball
Individual games/Activities	1. Badminton 2. Combat Activities – Judo 3. Table Tennis 4. Educational Gymnastics/Aerobics/Dance 5. Swimming
Athletics	1. Walking

	2. Track and Field – Running events
	3. Track and Field – Jumping events
	4. Track and Field – Throwing events
	5. Endurance Running

Category 1: Team Games

The students should be able to:

- execute the basic skills and techniques that will allow them to participate in the recognized version of the game;
- show an understanding of the basic rules and regulations governing the game, be able to participate in the recognized version of the game.

1. **Basketball**
    - ➢ Basic Stance - Triple threat position
    - ➢ Dribbling
    - ➢ Passing and Receiving - Chest pass, Bounce pass, Overhead pass
    - ➢ Shooting - Set shot, Jump shot, Lay up shot
    - ➢ Footwork - Stopping with the ball, Pivoting
    - ➢ Position of players during attack and defence
    - ➢ Basic rules and regulations

2. **Football**
    - ➢ Passing – right foot, left foot, inside/outside of foot
    - ➢ Control – chest, foot, thigh
    - ➢ Heading – attacking/defending/passing
    - ➢ Shooting/kicking – right foot, left foot, inside/outside of foot, volley kick
    - ➢ Goal keeping
    - ➢ Throw in
    - ➢ Positions and role of players during attack and defence.
    - ➢ Basic rules and regulations

3. **Handball**
    - ➢ Passing /receiving – Overhead pass, side pass, lob pass
    - ➢ Dribbling
    - ➢ Shooting – Set shot, Jump shot, penalty shot

➢ Goal Keeping

➢ Role and positioning of players during attack and defence

➢ Individual and team defence

➢ Basic rules and regulations

4. **Volleyball**

➢ Receiving and Passing – Volley pass, forearm pass

➢ Serve – underarm serve, (overarm/tennis serve, for boys)

➢ Attack and defence in volleyball – pass, set, smash sequence.

➢ Positioning of players during a serve, attack and defence.

➢ Basic rules and regulations

Category 2: Individual Games and Activities

1. **Badminton**

➢ Forehand and backhand grips

➢ Footwork and body position

➢ Forehand and backhand clear

➢ Forehand smash

➢ High and low serves

➢ Basic positioning in singles and doubles

➢ Basic rules and regulations

2. **Combat Activities – Judo, Self Defence**

➢ Basic falls, grips, throws and holds in Judo

➢ Stances in attack and defence

➢ Simple attacking and defensive tactics

Self Defence

➢ The basic moves and tactics in self defence combat activities

➢ Basic rules and regulations

3. **Table Tennis**

➢ The shake hand grip

➢ The pen hold grip

- ➢ Stance and footwork
- ➢ The serve: the short serve, long serve
- ➢ Basic strokes: forehand drive, back hand drive, forehand push, back hand push
- ➢ Basic rules and regulations

4. Educational Gymnastics

- ➢ Basic Skills – Head stand, Forward roll, backward roll, cartwheel, forward roll to straddle, backward roll to straddle
- ➢ Safety procedures – warm up and cool down, use of mats, support of peers.

5. Aerobics & Dance

- ➢ Bodily movements for exercise and dance
- ➢ Individual and group movement patterns
- ➢ Improvisation and selection of movements
- ➢ Use of costume, choreographic aids and synchronisation of movement.

6. Swimming

- ➢ Water safety
- ➢ Floating
- ➢ Treading

Body position, Leg action, Arm action, Timing, Breathing, Starting and Turning in each of the following strokes:

- ➢ Front Crawl
- ➢ Back stroke
- ➢ Breast Stroke (Optional)
- ➢ Basic rules and regulations

Category 3: Athletics

(where there is more than one event in the activity group, underlined each event should be considered as one activity and the appropriate teaching time devoted to it.)

1. Walking

Walking style and posture,

Basic competition rules and procedures

2. Track and Field – Running events

- ➢ Sprints and mid distances :

Start, pacing, posture and body movements, racing tactics, finish

  ➢ Relays – start, baton passing: visual/non visual, upsweep, downsweep, acceleration zone, exchange zone, positioning in lanes.

3. **Track and Field – Jumping events**

  ➢ Long Jump

  ➢ High Jump

Approach run, take off, jump, body position in the air, landing.

4. **Track and Field – Throwing events**

  ➢ Shot put

  ➢ Javelin

  ➢ Discus throw

  Grip, Stance, preparation, execution, follow through and withdrawal from the throwing area

5. **Endurance Running**

Warm up, mental preparation, running style, pacing , footwear and clothing, cool down and stretching.

Interval training, Fartlek training.

Notes to Teachers

In component 2 teachers will select activities according to the resources available. In schools where adequate resources and facilities are available, teachers should aim at exposing students to a wide variety of activities over the three years. Where resources are limited, teachers may aim at improving the skill level of the students in a few activities chosen.

A good balance between the categories should also be maintained so that students develop a range of skills and have a wide range of activities from which they can choose for leisure.

10 Visual Arts

Introduction

Visual Arts is and important and relevant area of learning that contributes to the creative and mental development of the student. As such, it has its role in the lower secondary curriculum.

Through Visual Arts, the student finds a powerful outlet to communicate ideas, express feelings and to connect the student to the rich cultural and historical heritage.

Visual Arts activities provide the student with opportunities to experiment and investigate materials and processes, express ideas visually, use art terminologies and make informed judgment on art forms. In brief, Visual Arts enables the student to understand the role of Art in society and also to provide her/him with scope to unfold her/his creative potentials.

Visual Arts cuts across all areas of learning in line with the cross curricular issues laid down in the NCF.

The aims of Visual Arts at lower secondary are to:

- Expose the student to art forms from a cultural and historical perspective.
- Enable the student to understand, analyse and appreciate diverse art forms.
- Engage students in discussion on art practices, past, present and future.
- Discuss elements of art and principles of design.
- Engage student in research, investigation and experimentation of media, techniques and processes.
- Enable the student to communicate ideas visually.
- Enable the student to work from both primary and secondary sources.
- Enable students to develop skills and competence in making art.
- Make the student to understand the role and function of art.
- Promote divergent thinking in problem solving tasks.

Assessment objectives

Visual Arts tasks will be assessed through both the process and the end product. Most of the thinking and looking for appropriate solutions happen in the process. The process should be seen as a driving force that reflects divergent thinking and enables one to constantly revisit one's idea. The experience reflects engagement and confidence in the realization of the final product.

The outcomes that inform the assessment objective are:

(i) knowledge with understanding
(ii) interpretation and creative response
(iii) analysis and evaluation

A. Knowledge with understanding

1. Show awareness of the elements of art and different art forms.
2. Demonstrate knowledge and understanding of visual arts materials, techniques and process.
3. Demonstrate skills and competence in making art forms.

B. Interpretation and creative responses

1. Research appropriate resource.
2. Communicate ideas and feelings visually.
3. Demonstrate divergent thinking in assessing a problem and arriving at an appropriate solution.
4. Respond to visual arts tasks in a creative and original way.

C. Analysis and evaluation

1. Make informed judgment in appreciating art works of self and others.
2. Use appropriate art terms to discuss materials, techniques and processes.
3. Demonstrate aesthetic qualities.

Application of assessment criteria.

A. Knowledge with understanding

(1) _____ 10 marks

(2) _____ 10 marks

(3) _____ 10 marks
_____
30
_____

B. Interpretation and creative response

(1)_____ 10 marks

(2)_____ 15 marks

(3)_____ 15 marks

(4)_____ 10 marks
_____
50
_____

C. Analysis and evaluation

(1)_____ 5 marks

(2)_____ 10 marks

(3)_____ 5 marks
_____

20
_____

Total   **100 marks**

Curriculum content

Form I: Year 1

Drawing: Media and techniques. Exploration (mark making with pencil, felt tipped markers)
Object and figure drawing from observation and from imagination.
Proportion. Symmetry. One point perspective.

Printing: Media and techniques exploration (water based paint).   Colour theory and colour mixing (primary, secondary colours). Theme-based composition. (landscape, townscape, seascape). Still life and portrait composition.
Repeat pattern

Printmaking: Transfer printing.   Repeat pattern. Composition with regular and irregular shapes.   Block & relief printing (potato, string on wood).   Card edge and Stencil printing

Sculpture: Low relief collage with cards and scrap materials.
Assemblage with boxes and packages.   Papier maché and Clay modeling (simple forms)

Decorative Collage and Design:
      Photomontage. Mask. Bookmarker. Paper weaving. Paper mosaic, Transparency. Lettering and Calligraphy. Simple poster design

Form II: Year 2

Drawing: Media and techniques exploration (mark making with pencil,felttipped pens, pen and ink, wax crayons)
Body proportion. Perspective
Drawing from observation and from imagination
Cartoon strips. Negative Positive pattern and composition. Tints and shades.

Painting: Exploring painting media and techniques.
Colour theory and colour mixing. tonal painting. Painting with natural colours.
Realistic and abstract composition in colour.

Printmaking: Painting from found objects. Picture and pattern making.
Block and dot printing.
Stencil printing.

Sculpture: Carving (soap). Mobile. Assemblage. Relief collage. Papier maché and lamination. Unit construction.

Decorative and Design:
      Mask and Puppetry. Cut and turn. Cut and move. Scraffito. Paper batik, Transparency. Weaving. Mosaic collage. Rangoli. Calligraphy. Poster design and Logogram.

Form III: Year 3

Media and Techniques exploration (pencil, pen & ink, markers, charcoal stick, pastel)

Drawing: Principles of perspective.
Linear and tonal studies.
Composition with objects, figures and silhouettes.
Working on different surfaces.

Painting: Thematic painting composition (realistic, decorative and abstract approaches),
Colour mixing and colour expression.
Colour perspective.
Large scale composition.
Accordeon and Optical illusion composition.

Printmaking: Monoprint.   Stencil printing using photograph.   Block and relief printing.

Sculpture: Carving (plaster block).
Papier maché over armature.
Modelling and Construction.

Decorative and Design:
Manipulating photographs through cutting and re-assembling.
Weaving, Resist techniques and Creative embroidery. Rangoli.
Poster design.   Logogram, Calligram, CD & DVD sleeve.
Kite making. Stained glass painting.

Additional notes to Educators

It is understood that

1. Art history and art appreciation is not taught as a separate area of study but is rather integrated in the lessons

2. Activities should relate the local context from a historical and cultural perspective

3. ICT should be included in image making or as a support where appropriate.

Additional hints on assessment in Visual Arts

Visual Arts activities will be evaluated through a variety of assessment tools in line with the learning outcomes.

Some ways of assessing students are as follows:

11. **Observation of process**
    Educators should ensure that students engage in a process resulting to a final artwork. Through observation of students during the process of a work, Educators are able to assess development of idea, involvement and growth of students during this process of art making.

12. **Research and investigation**
    Through research and investigation students deepen their knowledge about a topic, theme or period and this enables them to formulate and articulate their ideas in a clearer and more mature way. Research and investigation can be in the form of both text and images.

13. **Experimentation and compilation of results in a portfolio**
    Students should be able to express ideas through making images in a variety of media, techniques and processes. Through investigation and experimentation of different materials, techniques and processes, students will able to acquire manipulative skills.

14. **Mounting and display**
    Educators should ensure that there is enough space and scope for mounting and display of work of students as this acts as a motivation and boost for these students. Also, students develop organizational skills together with a sense of aesthetics.

15. **Presentation**

Presentation is an important tool to assess students as they can formulate verbally ideas that they have expressed visually in their artwork. Hence, they are able to support their work while also developing communication skills.

16. **Written work / annotations**
    Students should be motivated to engage in written work about artworks, artists, periods and cultures to develop critical thinking and appreciation. Students should also be encouraged to make annotations during preparation of works leading to final work. Annotations often help students to express the relevance of preparatory work to the final work.

17. **Project work**
    Project based learning in visual arts will enable students, individually or in group, to investigate a given problem, make in-depth inquiry , evaluate and select final ideas leading to final realization.

18. **Critical evaluation by students**

Students should also be able to make informed judgements on artworks. They should be able to analyse and appreciate their works, works of peers and that of artists of different countries and cultures.

11 Music

Introduction

In all societies, music is used to express a rich and diverse heritage of traditional and contemporary cultures. It is an integral part of everyday life serving self-expressive, Social, Cultural and Educational ends. Music contributes to the quality of students' holistic education and plays a part in nurturing them to become informed audiences for the arts.

Through creating music, singing and playing instruments, students learn to express themselves creatively in different modes. Listening and appreciation skills enable them to respond and engage with new music throughout their lives.

The music syllabus focuses on cultivating and developing the students' skills and knowledge through providing them direct experiences in listening and performing.

The aims of Music at Lower Secondary are to:

- enable students to read, write and perform a variety of musical styles
- equip students with the knowledge and appreciation of the music of the world
- equip students with musical skills that are universally recognised and practised
- develop creativity and critical thinking skills
- develop a desire for personal and group expressive through music and a life-long love for music

Assessment Objectives

Assessment will be conducted regularly to provide students with information on their strengths and areas for improvements. Different modes of assessment can be employed to facilitate students' learning, such as project works, short answer tests, short essays, written assignments. These assignment tools should help to display student's learning and thinking process rather than mere reproduction and knowledge.

Listening

Students should be able to:

- Understand tone colour
- Differentiate major orchestral instruments and instrument families
- Identity and comment on music of various cultures
- Comment on history of music
- Show aural awareness, perception and discrimination.

Composing

Students should be able to:

- Identify basic elements/concepts
- Read, write, music
- Define terminologies used in music
- Describe principles and techniques in music production
- Compose or arrange simple melodies using musical notes and symbols

Performing

Students should be able to:

- Perform music pieces in solo or in a variety of ensemble
- Perform selected styles of music
- Know basic techniques of the chosen instrument
- Read at sight at appropriate level

Weightings

- The assessment objectives are weighted to give an indication of their relative importance.
  They are not intended to provide a precise statement.
  The number of marks allocated to a particular assessment objectives.

Performing: 40%

Listening: 30%

Composing: 30%

Students study music elements/Concepts which are important aspects in music. Listening is also an important element of instrument studies. Students are exposed to a wide range of listening experiences.

RHYTHM

Musical Notes

- The names, symbols and values of musical notes

  (semibreve, minim, crochet, quaver, and semiquaver)

  - Name of musical notes
  - Draw musical notes
  - State values of musical notes

Time Signature

- Simple time signature (duple, triple, quadruple, compound)
  - Define time signature
  - Read and write rhythms using simple time signature
  - Perform rhythms using simple time signatures

Musical rests

- Musical rest
  - Define, read, and write rhythm using rests.

Grouping of notes and anacrusis

- Define anacrusis and its application
- Grouping notes and its funtions

MELODY

- Treble and bass clefs
- Musical signs, terms and symbols
- Tone, semitones, and accidentals
- Intervals
- Scales (major)
- Arpeggios
- Writing a simple melody to a given text

MUSICAL INSTRUMENT

- Brief history and development of the instrument(tuned or untuned)
- Methods and techniques
- Reading at sight
- Performing both in solo and ensemble

WORLD MUSIC

- Brief introduction to classical music
- Brief introduction to popular and folk music
- Brief introduction to music of various culture (Indian and African)

Form II- Year II

Students acquire knowledge and skills through the learning and teaching of this content.

Students participate in reading, writing, performing music and explore different styles, forms of music from different cultures.

RHYTHM

Dotted notes, ties and slurs

- Features of dotted notes, their musical signs and respective notes values
  - Features of a tie
  - Features of the slur

Triplets

- Features of a triplet

Compound time

- Features of a compound time

MELODY

Dynamics and expressive techniques

Construction of the major and minor scales

- Features of triads and chords (major)

MUSICAL INSTRUMENT

- Reading and playing notational music
- Theoretical study of the instrument
- Performing of simple melodies

WORLD MUSIC

- Brief Introduction to Romantic Music
- Brief introduction to Jazz Music
- Brief introduction Popular Music
- Introduction to Folk Music

Year III (Music)

Students acquire knowledge and skills through the learning of the basic elements of music. They also explore the styles and forms of music from different cultures. Students participate in reading, writing and performing music.

RHYTHM

Musical Notes

- Note values

Time Signatures

- Reading and writing using simple and compound time signatures

MELODY

- Construction of Major and minor scales (Harmonic and Melody)

Tonic Triads

- Construction of major and minor tonic triads

MUSICAL INSTRUMENT

- Reading and playing notational music in major and minor scale
- Performing music pieces with simple accompaniment

MUSIC ELEMENTS /CONCEPTS

- Beat/Pulse, Duple, Triple, Quadruple   times
- Structure (binary and ternary form)

CLASSIFICATION OF MUSICAL INSTRUMENTS

- String instruments
- Wind instruments
- Percussion instruments

WORLD MUSIC

- Brief introduction to modern music
- Brief introduction to music of various culture (Indian music, Chinese music, African music)

Additional notes to Educators

Evaluation

The music syllabus is essentially to develop the musicianship of students by increasing awareness and enabling musical thinking. It is concerned with those elements of music which are common to all musical styles. We would agree that music is to be enjoyed. However we need to ensure that its joys and demands play a full part in the education of all students and that the necessary preparation are made to guarantee the progressive accumulation of skills ,experience and insight necessary for musical achievement. The topics and content should be used as indicative materials and area of study, keeping in view the assessment objectives. While each school will have the freedom to choose their area of emphasis, it must be ensured that other areas of the syllabus be covered at least 50% of the materials. However a student's education must have progression, continuity and achievement. Therefore, within the overall pattern of class activity, structure your teaching to allow for the frequent practice of skills and for the application and sharing of acquired knowledge.

Assessment is an integral part of the educational process. Students may be asked to produce different kinds of work as written assignment, project, practical performances related to the three attainment targets of performing/ composing and listening.

It is important that you plan the learning and teaching sequence so that there is a balanced spread of assessment during the year. Some tasks, such as projects can be designed so that they are completed over a period of time rather than at the end of the unit. Assessment involves focusing less on whether a student has "passed or failed" and more on what outcomes a student has achieved in which areas further support is required.

Performing
Assessment may be done whether in solo, duet or ensemble where the technical competences, sight reading interpretative understanding of the music performed will be highlighted.

Listening
The following may be assessed in a number ways such as multiple choice, matching, project works, true or false, short answers, assignments.
- Tone colour
- Major orchestral instruments and families
- Music or various culture including African music, Indian music, Chinese music
- Aural discrimination

- Aural recognition of music concepts

Composing

Administration of a variety of tests (multiple choice, short answer, true or false, matching project works) can be applied in regard to the following:

- Basic elements/concept
- Theory
- Dynamics and expressive techniques