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préuniversitaires

English translation

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Identification du programme

Titre du programme : Sciences, lettres et arts

Numéro du programme : 700.A0

Type de sanction : Diplôme d'études collégiales

Conditions particulières d'admission : Mathématique 536
Physique 534
Chimie 534

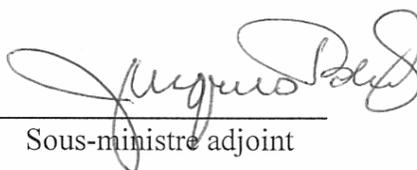
Nombre d'unités : 59 1/3

— formation générale : 21 1/3 ou 22 2/3
— formation spécifique : 36 2/3 ou 38
— dont au moins : 12 en Sciences de la nature
8 en Sciences humaines
4 en Arts
8 en Mathématique

Nombre d'heures-contact totales : 1 575

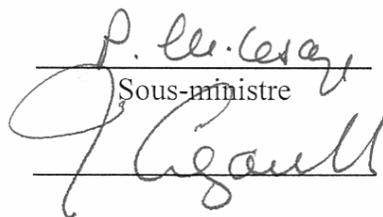
— formation générale : 525 ou 570
— formation spécifique : 1 005 ou 1 050

Recommandations


Sous-ministre adjoint

2000.10.31
Date

Approbation du ministre


Sous-ministre

00.11.04
Date

00 11 23
Date

Décision relative à la modification d'un programme d'études préuniversitaires

IDENTIFICATION DU PROGRAMME

Titre et numéro du programme : Sciences, lettres et arts (700.A0)

Type de sanction : Diplôme d'études collégiales

Nombre total d'unités allouées pour le programme : 59 1/3

Nombre d'heures-contact allouées pour le programme : 1 575

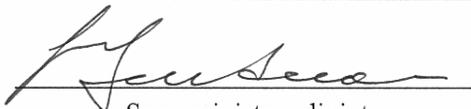
Modifications proposées :

- ajouter les tableaux d'équivalences entre le programme Sciences, lettres et arts (700.A0) et les programmes Sciences de la nature (200.B0), Sciences humaines (300.A0), Histoire et civilisation (700.B0), Arts plastiques (510.A0) et la formation générale complémentaire;
- ajouter le tableau d'équivalences entre la formation générale commune du régime 3 et celle du régime 2.

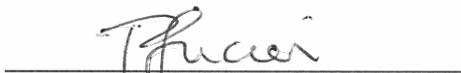
Session et année d'entrée en vigueur : Automne 2001

APPROBATION

Recommandations :


Sous-ministre adjoint
Enseignement supérieur

19/11/03
Date


Sous-ministre

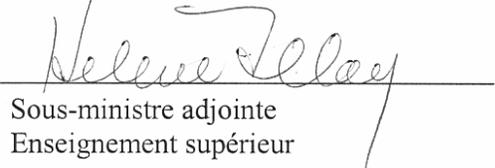
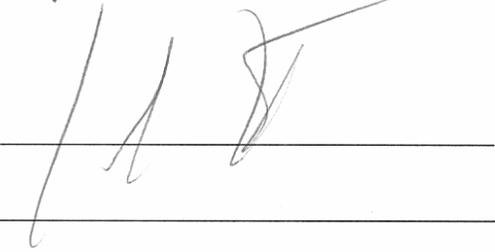
03.11.24
Date

Approbation du ministre :

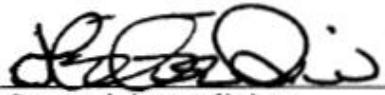
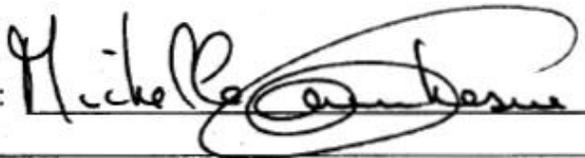


03.11.27
Date

Décision relative à la modification d'un programme d'études préuniversitaires

IDENTIFICATION DU PROGRAMME	
Titre et numéro du programme :	Sciences, lettres et arts (700.A0)
Type de sanction :	Diplôme d'études collégiales
Nombre total d'unités allouées pour le programme :	59 1/3
Nombre d'heures-contact allouées pour le programme :	1 575
Modification proposée :	
▪	Mise à jour du tableau d'équivalences entre le programme <i>Sciences, lettres et arts (700.A0)</i> et le programme <i>Histoire et civilisation (700.B0)</i> .
Session et année d'entrée en vigueur :	Automne 2001
APPROBATION	
Recommandations :	
	 Sous-ministre adjointe Enseignement supérieur
	<u>19 fév. 06</u> Date
	 Sous-ministre
	<u>06.02.24.</u> Date
Approbation du ministre :	
	 Date
	<u>06.03.24</u> Date

**Décision relative à la modification
des conditions particulières d'admission
pour certains programmes d'études préuniversitaires**

Type de sanction :	Diplômes d'études collégiales
Modifications proposées :	Modifier, pour les programmes concernés, les conditions particulières d'admission pour celles apparaissant à l'annexe.
Session et année d'entrée en vigueur :	Automne 2010
APPROBATION DES PROGRAMMES	
Recommandations :	
 _____ Sous-ministre adjointe Enseignement supérieur	09/12/08 _____ Date
 _____ Sous-ministre	2008.12.29 _____ Date
Approbation de la ministre :  _____	2009/01/20 _____ Date

Annexe

NOUVELLES CONDITIONS PARTICULIÈRES D'ADMISSION POUR LES PROGRAMMES D'ÉTUDES PRÉUNIVERSITAIRES À COMPTER DE L'AUTOMNE 2010

No	Titre du programme	Préalable actuel	Préalable A-2010
			La légende au bas de la liste donne la signification des abréviations
200.B0	Sciences de la nature	Mathématique 536 Physique 534 Chimie 534	TS ou SN 5 ^e Physique 5 ^e Chimie 5 ^e
200.C0	Sciences informatiques et mathématiques	Mathématique 536 Physique 534 Chimie 534	TS ou SN 5 ^e Physique 5 ^e Chimie 5 ^e
300.A0	Sciences humaines	Mathématique 526 ou Mathématique 536 (pour les objectifs 022X, 022Y et 022Z)	TS ou SN 5 ^e (pour les objectifs 022X, 022Y et 022Z)
501.A0	Musique	Musique 534	Musique 5 ^e
700.A0	Sciences, lettres et arts	Mathématique 536 Physique 534 Chimie 534	TS ou SN 5 ^e Physique 5 ^e Chimie 5 ^e
700.B0	Histoire et civilisation	Mathématique 526 ou Mathématique 536 (pour les objectifs 022X, 022Y et 022Z)	TS ou SN 5 ^e (pour les objectifs 022X, 022Y et 022Z)

Signification des abréviations des nouveaux cours préalables

Mathématique

TS 5^e Mathématique, séquence Technico-sciences de la 5^e secondaire (064506)

SN 5^e Mathématique, séquence Sciences naturelles de la 5^e secondaire (065506)

Science et technologie

Chimie 5^e Chimie de la 5^e secondaire (051504)

Physique 5^e Physique de la 5^e secondaire (053504)

Arts

Musique 5^e Musique, formation obligatoire de la 5^e secondaire (169502)

DEFINITION OF THE PROGRAM

Program title	:	Arts and Sciences
Type of program	:	Pre-university program
Program code and version	:	700.A0 (2010)
Type of certification	:	Diploma of College Studies
Special conditions for admission	:	Secondary V Chemistry Secondary V Mathematics: Technical and Scientific option or Science option Secondary V Physics
Number of credits	:	59 $\frac{1}{3}$
— General education component:		21 $\frac{1}{3}$ or 22 $\frac{2}{3}$
— Program-specific component :		36 $\frac{2}{3}$ or 38
Number of periods of instruction	:	1575
— General education component:		525 or 570
— Program-specific component :		1005 or 1050

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College-Level Programs

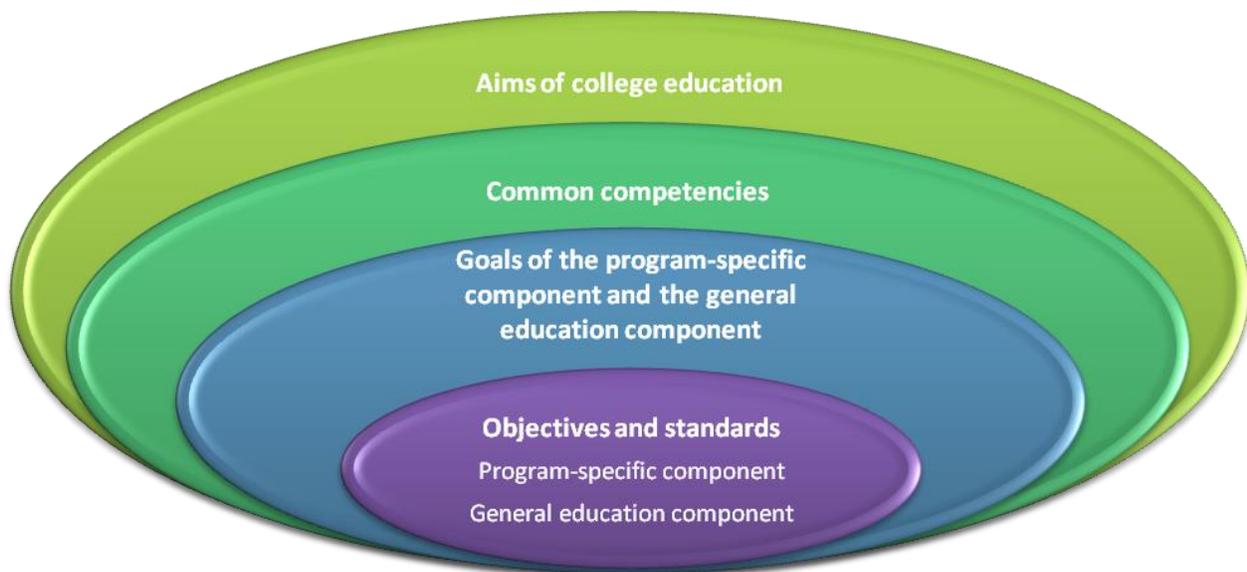
In Québec, college is the next stage after the compulsory years of schooling (elementary and secondary school). College graduates enter the labour market directly or proceed to university studies. The Minister of Education, Recreation and Sports establishes the programs of study, while individual colleges ensure their implementation.

A college-level program provides the frame of reference within which the students acquire designated competencies in order to qualify for a profession or to pursue their studies. For the teachers, the program outlines learning objectives and defines the scope of their application.

The following figure illustrates the relationships among the elements of a college-level program, going from the general to the specific:

- Aims of college education
- Common competencies
- Goals of the program-specific component and the general education component
- Objectives and standards of the program-specific component and the general education component

Figure 1 – Elements of a College-Level Program



Programs leading to the Diploma of College Studies (DCS) include two main components: a general education component and a program-specific component. Both these components contribute to a student's education, as the knowledge, skills and attitudes imparted in one are emphasized and applied in the other, whenever possible. General education is an integral part of each program and, when coupled with the program-specific component as part of an integrated approach, fosters the development of the competencies required by all programs.

All college-level programs are characterized by three educational aims and five common competencies.

Aims of College Education

Educational aims guide the actions of those involved in the students' education. They facilitate the program-based approach by establishing the outcomes expected of students at the end of their college studies.

To educate students to live responsibly in society

At the personal level, students show they are engaged in their learning. They demonstrate rigour and perseverance as well as skills enabling them to analyze, synthesize and carry out research. At the professional level, they draw on their ability to apply their knowledge, skills and attitudes and to adapt to new situations. In the realm of social and civic life, students assume their role as informed and responsible citizens by adopting desirable attitudes and behaviours. They show evidence of open-mindedness and a sense of community in their dealings with others.

To help students integrate cultural knowledge into their studies

Students continue to enhance their personal culture and are able to appreciate various forms of cultural expression. Through their studies, they have become familiar with cultural productions. They can interpret the meaning and assess the value of these productions and are aware of the role they themselves play in the expression of culture. The development of their critical judgment and social conscience and the consolidation of their historical references have broadened their cultural horizons. Students recognize the diversity of social and cultural realities and appreciate the breadth and wealth of Québec's culture. Lastly, they apply their cultural knowledge by making connections among events occurring around them and by being involved in cultural, artistic, sports, technical or scientific activities.

To help students master language as a tool for thought, communication and openness to the world

Students understand and produce various forms of complex discourse in different situations. They are able to read and write independently at an advanced skill level. Their mastery of language allows them to engage in independent reflection, to know where they stand relative to various forms of discourse, and to express themselves in a structured, rational and precise manner. When faced with different communication situations, students are able to express their world view and identity. Language mastery also helps students be receptive to the dissemination of a broad range of knowledge. It allows them to share points of view and improve their communication skills in both the language of instruction and a second language.

Common Competencies of College Education

Common competencies are associated with the aims of college education. They help to ensure students are adequately prepared for personal and professional life.

Solve problems

Students can identify a problem and analyze its elements. They can list and classify possible solutions and implement the one they feel is most effective. They reflect on their approach, assess the appropriateness of the chosen solution and determine whether it can be applied in other situations.

Use creativity

Students discover new possibilities by juxtaposing, combining and reorganizing existing concepts, and by using ideas, strategies and techniques in new ways. Students are open to new ideas and different ways of doing things, while assessing their effectiveness.

Adapt to new situations

When faced with a new situation, students are both open and critical. After analyzing the situation at hand, they identify and test ways of dealing with it. To adapt to a world that is constantly changing, students work in teams and show concern for keeping their knowledge up to date.

Exercise a sense of responsibility

Students assume their role as responsible citizens and act in accordance with socially and democratically desirable attitudes and behaviours. They act ethically and with integrity, exercise critical judgment and are fully engaged, personally, socially and professionally. Independent and organized, they respect their commitments.

Communicate

Students deliver a coherent message adapted to each situation. They are able to listen and to structure their thoughts in order to formulate a clear message. They rely on a variety of communication strategies and use information and communications technologies. They evaluate the impact of their communication and review their strategies, as needed.

Implementation of College-Level Programs

Each college determines the ways in which the educational aims, common competencies, goals, objectives and standards are implemented. This does not mean that students in a college must follow common courses. Each course may contribute to the full or partial achievement of these elements. The important thing is that all of these elements are taken into consideration in one or more courses and that they become specific focuses of teaching and learning, since they have been recognized as essential to the practice of a profession or to the pursuit of university studies in a given discipline.

The Arts and Sciences Program

The *Arts and Sciences* program is aimed at all those who wish to explore an expanded range of knowledge – in science, mathematics, the social sciences, the creative arts and the humanities – and to acquire the basic learning and skills that such studies provide. This program combines the humanistic and scientific approaches, and is as much at home in contemporary culture as in a context where the implementation of learning strategies facilitates the establishment of links between these fields. It also emphasizes each person's ability to take charge of his or her learning process, and to become more autonomous and more capable of using formal analysis in different situations. The program's broad scope fosters the acquisition of comprehensive general knowledge, thereby giving students the background required for almost all university programs (with the exception of visual arts, music and dance).

Another original feature of the program is the relationship it establishes among the various subjects, in order to attain the objectives that have been set and develop the competencies that are targeted. It also stands out for its enrichment of the objectives in language of instruction and literature and in humanities. Finally, this program is intended for all those who have a strong interest in intellectual work and the potential to do well in college.

The program was designed in keeping with the *Cadre général d'élaboration des programmes d'études préuniversitaires*, the framework for the development of pre-university programs, whose aim is to:

- Harmonize the general education and program-specific components of programs (program-based approach)
- Harmonize pre-university programs with university programs (training continuum)
- Foster the acquisition of comparable competencies throughout the college network
- Foster a type of education that contributes to the overall development of the person

This document was developed in cooperation with a program advisory committee composed of university representatives, academic deans and college teachers.

The *Arts and Sciences* program includes three components: a program-specific component, a general education component that is common to all programs, and a general education component that is specific to each program. The program does not include a complementary general education component, given that the goals of such a component are met through the diversity of the fields of knowledge covered.

- The program-specific component consists of $36\frac{2}{3}$ or 38 credits.
- The general education component that is common to all programs consists of $15\frac{1}{3}$ or $16\frac{2}{3}$ credits:
 - Language of Instruction and Literature: $7\frac{1}{3}$ credits
 - Philosophy or Humanities: 4 or $4\frac{1}{3}$ credits
 - Physical Education: 2 of 3 credits
 - Second Language: 2 credits
- The general education component that is specific to the program consists of 6 credits:
 - Language of Instruction and Literature: 2 credits
 - Philosophy or Humanities: 2 credits
 - Second Language: 2 credits

Aim of the Program

The *Arts and Sciences* program is intended to give students a comprehensive education that will equip them to enter all university programs (with the exception of visual arts, music and dance).

Goals of the Program

Program-Specific Component

At the end of the *Arts and Sciences* program, students will be able to:

- Situate and connect the characteristics of the subjects studied
- Assimilate concepts and work methods required to study in the various fields of knowledge
- Use intellectual work methods and study techniques
- Use information and communications technologies
- Communicate clearly and correctly
- Take charge of their own personal and social development

Situate and connect the characteristics of the subjects studied

To situate and connect the subjects and phenomena studied in different fields of knowledge, students must not only be familiar with the key concepts, laws and principles that characterize these fields but must be able to:

- establish links among the theories, approaches and methodologies specific to the various subjects by situating them in their historical, social, cultural, scientific, literary and artistic contexts;
- understand the scope and limits of the scientific approach as a way of constructing knowledge;
- recognize the contributions of science, technology, literature and the arts to the development of society.

In each course, the choice of learning activities must reflect a constant concern for opening the way to other fields of knowledge.

Assimilate concepts and work methods required to study in the various fields of knowledge

Assimilation – which is not an end in itself – must take place in the context of analysis, research, creation, discussion, verification, criticism and stocktaking with respect to the works, phenomena and problems dealt with in the program. All of the courses must focus on this goal, to enable students to:

- discuss questions and themes spanning several subjects;
- analyze, assess and criticize works, texts and theses;
- solve problems;
- analyze phenomena using approaches from different disciplines;
- conduct research and carry out projects pertaining to situations, problems or issues by drawing on several fields of knowledge.

Use intellectual work methods and study techniques

To ensure that students master the work methods required to pursue university studies, the program must focus explicitly on the development of a certain number of practical skills. The work methods used must contribute to the integration of the various fields of knowledge and to the establishment of links among them. For these reasons, students must learn to:

- manage their time;
- develop good note-taking habits;
- apply effective reading techniques;
- apply summarizing techniques;
- carry out documentary research;
- adopt good lab-work practices.

Use information and communications technologies

The students must acquire the ability to choose and use the technological resources placed at their disposal:

- various types of information processing software, such as word processing, data processing and learning software;
- various data retrieval, documentation and communication systems (Internet, intranet, etc.).

Communicate clearly and correctly

Mastery of written and spoken language is essential for the clear expression of ideas. All the courses in the program must contribute to the development of the following capacities:

- to present an argument, analysis, commentary, process, result or work in the appropriate form;
- to draft social, literary and scientific texts;
- to express oneself effectively in presentations or discussions in small or large groups.

With respect to second language studies, the emphasis will be on the development of reading skills.

Take charge of their own personal and social development

Aside from strictly academic learning, the program must provide students with concrete opportunities to participate in their own education and to become personally involved in their development. Throughout their studies, they must:

- add to their stock of cultural knowledge;
- express their interest in culture, science, social science, the creative arts and literature;
- be concerned with the ethical impact of science and technology on individuals and societies;
- know how to conduct themselves in society;
- make physical activity a part of their lifestyle in order to stay healthy;
- demonstrate autonomy and a commitment to the successful pursuit of university studies.

General Education Component Common to All Programs and General Education Component Specific to the Program

The general education components that are common to all programs and specific to the program contribute to the development of twelve competencies associated with the three aims of college education:

- for the aim *To educate students to live responsibly in society:*
 - Demonstrate independence and creativity in thought and action
 - Demonstrate rational, critical and ethical thinking
 - Develop strategies that promote reflection on their knowledge and actions
 - Pursue the development of a healthy and active lifestyle
 - Assume their social responsibilities

- for the aim *To help students integrate cultural knowledge into their studies:*
 - Recognize the influence of culture and lifestyle on the practice of physical activity and sports
 - Recognize the influence of the media, sciences or technology on culture and lifestyle
 - Analyse works in philosophy or the humanities emanating from different historical periods and movements
 - Appreciate literary and non-literary works of other artistic expressions emanating from different historical periods and movements

- for the aim *To help students master language as a tool for thought, communication and openness to the world:*
 - Improve communication in the second language
 - Master the basic rules of discourse and argumentation
 - Refine oral and written communication in the language of instruction

English, Language of Instruction and Literature

Students who have achieved the general education objectives in English, Language of Instruction and Literature,

- will be able to demonstrate their knowledge of the following:
 - the basic vocabulary and terminology used when discussing literary works
 - ways to apply an independent analytical approach to literary genres
 - ways to apply an independent analytical approach to literary themes
 - the appreciation of literary and non-literary works or other artistic expressions of different historical periods and movements
 - ways to identify the socio-cultural and historical context of different periods and movements
 - ways to refine oral and written communication in the language of instruction

- will be able to demonstrate their ability to do the following:
 - read, write, listen and speak at a college level of proficiency
 - develop their own ideas in arguments and theses
 - organize their arguments and theses in a discourse and edit their work
 - produce and analyze various styles of discourse
 - communicate in the styles of discourse appropriate to one or more fields of study

- will be encouraged to develop the following attitudes:
 - independence, individuality, and open-mindedness in thought and action
 - an appreciation of literature and other artistic works from different periods
 - a recognition of the role of media within a society and its culture
 - an awareness of strategies that foster self-reflective practice in their learning and actions
 - critical and ethical thought

Humanities

Humanities constitutes a thematic, multidisciplinary and, at times, transdisciplinary exploration of humankind, including its accomplishments, failures, abilities, creations, ideas and values. Students who have achieved the general education objectives in humanities

- will be able to demonstrate their knowledge of the following:
 - the main concepts, limits and uses of a form of knowledge including significant historical reference points
 - the main concepts, limits and uses of a world view
 - the nature and organization of the basic elements of an ethical question
 - methods for coherent integration of concepts and the formulation and synthesis of ideas
 - the importance and practice of adequately substantiated argumentation, written and oral
- will be able to demonstrate their ability to do the following:
 - describe, explain and organize the main elements, ideas, values and implications of a world view in a coherent fashion
 - compare world views
 - recognize the basic elements in a specific example of the organization, transmission, and use of knowledge
 - recognize forms of creativity and original thought
 - define the dimensions, limits and uses of knowledge in appropriate historical contexts
 - identify, organize and synthesize the salient elements of a particular example of knowledge
 - situate important ethical and social issues in their appropriate historical and intellectual contexts
 - explain, analyze and debate ethical issues in a personal and professional context
 - utilize the multiple strategies of critical thinking
- will be encouraged to develop the following attitudes:
 - openness to diversity and pluralism
 - awareness of the limits of knowledge claims, world views and ethical perspectives
 - respect for the points of view of others
 - empathy and acceptance of others
 - concern for global issues
 - determination to continue learning

French as a Second Language

Students who have achieved the general education objectives in French as a Second Language

- will be able to demonstrate their knowledge of the following:
 - different reading techniques
 - the formal elements needed to produce a structured text, both orally and in writing
 - different forms of discourse and their specific uses
- will be able to demonstrate their ability to do the following:
 - question, analyze, judge and defend an argument in French
 - reflect on their knowledge and actions notably by revising their written productions
 - maintain social relationships and share in the cultural life of Québec
 - establish and maintain work-related relationships in French
- will be encouraged to develop: the following attitudes of:
 - openness to the various aspects of Québec culture
 - recognition and promotion of creativity
 - readiness to participate in social and economic life

Physical Education

Students who have achieved the general education objectives in physical education

- will be able to demonstrate their knowledge of the following:
 - notions and concepts based on the findings of scientific research and how to apply them methodically to physical or sporting activities
 - the relationship between lifestyle, physical activity, physical fitness and health
 - ways to evaluate their own abilities and needs with respect to activities that can enhance their health and fitness
 - the rules, techniques and conditions involved in different types of physical or sporting activity
 - the main socio-cultural determinants of physical activity and a healthy lifestyle
- will be able to demonstrate their ability to do the following:
 - give an initial account of their abilities, attitudes and needs
 - choose physical activities on the basis of their motivation, their ability to adapt to effort and their need for change
 - apply the rules and techniques of a certain number of physical activities with a view to practising them sufficiently on a regular basis
 - set goals that are realistic, measurable, challenging and situated within a specific time frame
 - improve their mastery of basic techniques and strategies associated with physical activities
 - evaluate their skills, attitudes and progress in order to adapt their means or objectives in their practice of physical activities
 - autonomously maintain or increase their physical activity and fitness levels in order to develop a healthy and active lifestyle
 - use their creativity in physical activities
 - express their choice of activities in a clear and reasoned manner

- will be encouraged to develop the following attitudes:
 - awareness of the importance of regular and sufficient physical activity in order to improve their fitness
 - awareness of the factors that encourage them to practise physical activity more often
 - awareness of the importance of evaluating and respecting their ability to adapt to effort, as well as an awareness of the conditions necessary to carry out a physical activity program, before committing to it
 - self-confidence, self-control, cooperation, respect and understanding, through knowledge and through the practice of a physical activity
 - respect for ethical behaviour when participating in a sport or a physical activity
 - respect for individual and cultural differences as well as for the environment in which the sport or physical activity takes place
 - appreciation for the aesthetic value of physical activity as well as the opportunities for enjoyment it provides
 - readiness to adopt the values of discipline, effort, consistency and perseverance
 - readiness to promote, as a social value, the regular and sufficient practice of physical activity

Program Objectives and Standards

List of Objectives

Program-Specific Component

36½ or 38 credits, 1005 or 1050 periods of instruction

Common Objectives

- 01Y0 Appreciate the contribution of works of literature and key texts in the humanities to human experience
- 01Y1 Solve problems using differential calculus
- 01Y2 Solve problems using integral calculus
- 01Y3 Analyze phenomena using the statistical method
- 01Y4 Solve problems using linear algebra and vector geometry
- 01Y5 Analyze the structural and functional relationships that characterize living organisms as they evolve in their environment
- 01Y6 Solve problems associated with chemical changes in matter
- 01Y7 Interpret natural phenomena using models from mechanical physics
- 01Y8 Show the importance of historical heritage in the development of Western civilization
- 01Y9 Consider the influence of individual and social factors on human behaviour
- 01YA Make a judgment of fact on the dynamics of social change
- 01YB Deal with current questions associated with the international economy and politics
- 01YC Interpret works of art from different periods
- 01YD Create two- and three-dimensional art works
- 01YE Demonstrate their integration of the learning in the *Arts and Sciences* program

Optional Objectives

At least two objectives to be met from the following:

- 01YF Interpret natural phenomena using the laws of electricity and magnetism
- 01YG Interpret natural phenomena using optics, wave physics and modern physics
- 01YH Analyze the mechanisms of reactions
- 01YJ Analyze, from an evolutionary perspective, the adaptation of multicellular organisms to their environment

At least one objective to be met from the following:

- 01YK Create a work of art
- 01YL Discuss major problems of our time using more than one approach from the social sciences

Other optional objectives:

- 01YM Communicate at a rudimentary level in a modern language
- 01YN Communicate on familiar subjects in a modern language
- 01YP Communicate with a certain degree of ease in a modern language

General Education Component Common to All Programs
and General Education Component Specific to the Program
15⅓ or 16⅔ credits and 375 or 420 periods of instruction,
6 credits and 150 periods of instruction

English, Language of Instruction and Literature

- 4EA0 Analyze and produce various forms of discourse
- 4EA1 Apply an analytical approach to literary genres
- 4EA2 Apply an analytical approach to a literary theme
- 4EAP Communicate in the forms of discourse appropriate to one or more fields of study

Humanities

- 4HU0 Apply a logical analytical process to how knowledge is organized and used
- 4HU1 Apply a critical thought process to world views
- 4HUP Apply a critical thought process to ethical issues relevant to the field of study

French as a Second Language

One objective to be met from the following:

- 4SF0 Apply basic concepts for communicating in standard French
- 4SF1 Communicate in standard French with some ease
- 4SF2 Communicate with ease in standard French
- 4SF3 Explore a cultural and literary topic

One objective to be met from the following:

- 4SFP Apply basic concepts for communicating in French in relation to the student's field of study
- 4SFQ Communicate in French on topics related to the student's field of study
- 4SFR Communicate with ease in French on topics related to the student's field of study
- 4SFS Produce a text in French on a topic related to the student's field of study

Physical Education

At least two objectives to be met from the following:

- 4EP0 Analyze one's physical activity from the standpoint of a healthy lifestyle
- 4EP1 Improve one's effectiveness when practising a physical activity
- 4EP2 Demonstrate one's ability to assume responsibility for maintaining a healthy lifestyle through the continued practice of physical activity

Program-Specific Component

Common Objectives and Standards

Code: 01Y0

<i>Objective</i>	<i>Standard</i>
Statement of the Competency	Achievement Context
Appreciate the contribution of works of literature and key texts in the humanities to human experience.	<ul style="list-style-type: none"> • Within the context of the set of learning activities that foster attainment of the seven objectives and standards in the language of instruction and literature and in the humanities
Elements of the Competency	Performance Criteria
1. Establish the historical continuity of works.	<ul style="list-style-type: none"> • Reading of fourteen key works in literature and six in the humanities • Placement of the work in the context of a period or movement • Determination of the role and importance of the work in the history of literature and the humanities
2. Recognize influences shared by works of literature and key texts in the humanities.	<ul style="list-style-type: none"> • Identification of the significant elements shared by the works in literature and in the humanities being compared • Treatment, in a given work, of elements from the humanities and from literature • Explanation of how the works being compared influenced their period
3. Show how the humanities and literature interact with the development of science and art.	<ul style="list-style-type: none"> • Relevant linking of works in literature and in the humanities with scientific and artistic achievements • Comparison of these fields of knowledge in terms of their methods, subjects, limitations and purposes
4. Discuss the contribution of works of literature and key texts in the humanities to human experience.	<ul style="list-style-type: none"> • Description of the human experience conveyed by the work • Critique of the current relevance of the work • Comparison or contrast of works and authors • Writing of texts concerning the literary works (at least 800, 900 and 1000 words) and the works in the humanities (at least 1000, 1100 and 1200 words) • Oral presentations

<i>Objective</i>		<i>Standard</i>
Statement of the Competency		Achievement Context
Solve problems using differential calculus.		<ul style="list-style-type: none"> Working alone
Elements of the Competency		Performance Criteria
1. Represent the problem as a real function in one variable.		<ul style="list-style-type: none"> Clear description of relevant variables Precise formulation of the function Appropriate graph of the function
2. Apply differential calculus in solving the problem.		<ul style="list-style-type: none"> Appropriate use of the concepts of limit and derivative Relevant choice of the rules and techniques for calculating limits and derivatives Correct application of the rules and techniques for calculating limits and derivatives Algebraic operations in accordance with the rules Accuracy of calculations
3. Evaluate the results obtained in terms of the problem to be solved.		<ul style="list-style-type: none"> Correct interpretation of results Clear and precise formulation of the interpretation Assessment of the likelihood of the results
4. Explain the problem-solving process.		<ul style="list-style-type: none"> Rigorous presentation of the process Explanation of the steps in the process Use of appropriate terminology
Learning Activities		
Discipline:	Mathematics	
Weighting:	2-2-2	
Credits:	2	
Indications:	<p>Functions: algebraic, exponential, logarithmic, trigonometric and inverse trigonometric. Limit: intuitive approach, properties, calculation of limits, continuity, asymptotes. Derivative: geometric interpretation, definition, common rules and techniques, differentiation of composite functions and implicit differentiation. Study of the first and second derivative: growth and extrema of a function, concavity and points of inflection. Applications: Newtonian method, study of curves, Hospital's rule, optimization problems, variation rate.</p>	

<i>Objective</i>		<i>Standard</i>	
Statement of the Competency		Achievement Context	
Solve problems using integral calculus.		<ul style="list-style-type: none"> Working alone 	
Elements of the Competency		Performance Criteria	
1. Represent the problem in the form of a model.		<ul style="list-style-type: none"> Exact formulation of the function, integral or series Appropriate graph of the situation 	
2. Apply appropriate integral calculus in solving the problem.		<ul style="list-style-type: none"> Appropriate use of the concepts of integral and series Appropriate choice and correct application of integration rules and techniques Appropriate use of the techniques for analyzing sequences and series Algebraic operations in accordance with the rules Accuracy of calculations 	
3. Evaluate the results obtained in terms of the problem to be solved.		<ul style="list-style-type: none"> Correct interpretation of results Clear and precise formulation of the interpretation Assessment of the likelihood of the results 	
4. Explain the problem-solving process.		<ul style="list-style-type: none"> Rigorous presentation of the process Explanation of the steps in the process Use of appropriate terminology 	
Learning Activities			
Discipline:	Mathematics		
Weighting:	2-2-2		
Credits:	2		
Indications:	<p>Indefinite integral: primitive, properties, common integration rules and techniques, differential equations with separable variables.</p> <p>Definite integral: definition, properties, fundamental theorem of differential and integral calculus.</p> <p>Applications: calculation of area and volume, improper integrals.</p> <p>Series: definition, properties, convergence of numeric series and power series, Taylor and Maclaurin series.</p>		

Objective		Standard	
Statement of the Competency	Achievement Context		
Analyze phenomena using the statistical method.	<ul style="list-style-type: none"> • Using a graphic display calculator • Using data processing software • Using statistical tables and formulae • Using series of real data 		
Elements of the Competency	Performance Criteria		
1. Choose the statistical analysis techniques in accordance with the phenomenon or phenomena being studied.	<ul style="list-style-type: none"> • Identification of the quantitative characteristics required for statistical analysis • Accurate designation of the target population and the relevant variables • Appropriate choice of statistical analysis techniques 		
2. Describe the characteristics of the phenomenon or phenomena being studied.	<ul style="list-style-type: none"> • Proper organization of data in tables and graphs • Precise calculation of the measurements of central tendency, position, dispersion and association 		
3. Calculate the probability of events.	<ul style="list-style-type: none"> • Recognition of situations involving chance • Appropriate use of counting algorithms: permutations, arrangements, combinations • Correct calculation of the probability of an event • Accuracy of the probability distribution of a discrete random variable • Precise calculation of the mathematical expectation and variance • Appropriate use of probability models: binomials, Poisson, normal, Student, khi-square 		
4. Deduce the characteristics of the population on the basis of sample data.	<ul style="list-style-type: none"> • Proper choice of sampling method • Appropriate use of the concepts of estimation and hypothesis testing • Accurate estimation of the population parameters • Rigorous application of a hypothesis test 		
5. Interpret the results.	<ul style="list-style-type: none"> • Correct interpretation of the statistical analysis results • Clear and precise formulation of the interpretation • Appropriate use of the terminology 		

<i>Objective</i>	<i>Standard</i>
Statement of the Competency	Achievement Context
Solve problems using linear algebra and vector geometry.	<ul style="list-style-type: none"> Working alone
Elements of the Competency	Performance Criteria
1. Represent a problem as a matrix or vector model.	<ul style="list-style-type: none"> Accurate translation of the problem into vectors or matrices Accurate matrix representation of the system of linear equations Accurate graph of the vectors in the plane and in space Appropriate representation of a complex number
2. Apply matrix and vector calculus to solve a problem.	<ul style="list-style-type: none"> Appropriate use of the concepts of matrix and vector Correct performance of matrix or vector operations Appropriate use of the properties of matrices and vectors Accurate solution of a system of linear equations Accurate formulation of the equation for geometric loci Accurate representation of geometric loci Correct application of operations on complex numbers Algebraic operations in accordance with the rules Accurate calculations
3. Evaluate the results obtained in terms of the problem to be solved.	<ul style="list-style-type: none"> Correct interpretation of the results Clear and precise formulation of the interpretation Assessment of the likelihood of the results
4. Explain the problem-solving process.	<ul style="list-style-type: none"> Rigorous presentation of the process Explanation of the steps in the process Use of the appropriate terminology

Learning Activities

Discipline: Mathematics

Weighting: 2-2-2

Credits: 2

Indications: Matrices and determinants: definitions, properties, operations, applications, demonstrations.
Gauss-Jordan, Cramer and inverse matrix methods for solving systems of linear equations.
Geometric and algebraic vectors: definition, representation, properties, operations, applications, demonstrations.
Vector products: scalar, vector, mixed.
Vector space: reference, basis, dimension, linear combination, linear independence.
Studies of geometric loci: straight line in \mathbb{R}^2 and \mathbb{R}^3 , plane in \mathbb{R}^3 , relative positions, intersections, calculations of distances and angles.
Complex numbers: representations (algebraic, vector, trigonometric, polar), operations, properties, theorems.

<i>Objective</i>		<i>Standard</i>	
Statement of the Competency		Achievement Context	
Analyze the structural and functional relationships that characterize living organisms as they evolve in their environment.		<ul style="list-style-type: none"> • Working alone • Working in teams in the laboratory • Using software • Doing written work, or laboratory work leading to a written report 	
Elements of the Competency		Performance Criteria	
1. Describe emerging structural and functional characteristics of living organisms, in accordance with their level of organization.		<ul style="list-style-type: none"> • Precise description of levels of organization • Accurate relating of emerging components and structures, in accordance with the development of more complex life forms 	
2. Establish a systematic overview of the basic cellular processes found in living organisms.		<ul style="list-style-type: none"> • Appropriate description of the organization of the structures and functions that define cell dynamics • Clear differentiation of the various energy metabolisms in accordance with the evolution of the living organisms • Correct interpretation of the role of genetic regulation in cell development 	
3. Explain the evolution toward greater complexity of living organisms within an ecosystem.		<ul style="list-style-type: none"> • Supported differentiation of some models of evolution • Clear identification of the impact of biological, environmental and social factors on the levels of organization of the living organisms • Identification of ethical issues concerning living organisms in the development of science and technology 	
4. Analyze the regulating principles governing the survival of single- and multi-cell organisms.		<ul style="list-style-type: none"> • Appropriate identification of the processes regulating the various levels of organization in living organisms • Appropriate identification of the processes of intracellular and intercellular communication • Accurate relating of regulation and survival mechanisms in living organisms 	
5. Verify experimentally physicochemical phenomena found in living organisms.		<ul style="list-style-type: none"> • Systematic observation of specimens and phenomena • Use of experimental techniques in biology • Accurate relating of a hypothesis to its validation through observation or experiment • Correct presentation of the results in a report 	

Learning Activities

Discipline: Biology

Weighting: 3-2-3

Credits: 2 $\frac{2}{3}$

Indications: Diversity of living organisms and their general characteristics. Levels of organization. Evolutionary perspective.
Organization at the molecular level. Characteristics and functions of inorganic and organic molecules in living organisms.
Organization at the cellular level. Prokaryotes and eukaryotes. Description of cellular morphology: the plasma membrane, cytoplasmic organisms and nucleus. Physiology of the cell: cells and energy (photosynthesis, respiration, fermentation, chemiosynthesis); information coding (DNA and coding, product synthesis). DNA replication and cell division. Cell differentiation. Evolutionary perspective.
Organization at the level of the organism. Homeostasis in a given system.
Organization at the level of the ecosystem. Examples of homeostasis. Environmental management. Evolutionary perspective.

<i>Objective</i>		<i>Standard</i>	
Statement of the Competency		Achievement Context	
Solve problems associated with chemical changes in matter.		<ul style="list-style-type: none"> • Working alone • Using the periodic table • Using software • Working in the laboratory, with a safe operating procedure • Writing a report 	
Elements of the Competency		Performance Criteria	
1. Analyze properties of elements using a probability model.		<ul style="list-style-type: none"> • Proper use of the vocabulary of chemistry • Accurate interpretation of the spectrum of the hydrogen atom • Showing of the bases of quantum mechanics • Accurate interpretation of the four quantum numbers • Correct setting up of the periodic table • Accurate modelling of the atomic structures • Exact representation of the molecular structures 	
2. Predict the electronic structure of molecules.		<ul style="list-style-type: none"> • Description of the formation of the covalent bond • Correct identification of types of covalent bonds • Appropriate two- or three-dimensional representation of organic molecules • Correct application of basic models of the covalent bond 	
3. Perform quantitative analyses of chemical changes.		<ul style="list-style-type: none"> • Correct identification of the nature of a chemical equation • Appropriate formulation of a reaction • Proper application of weighting rules • Proper application of nomenclature rules • Proper application of the concept of equilibrium • Proper application of oxidation reduction laws 	
4. Predict interactions in the condensed phases of matter.		<ul style="list-style-type: none"> • Correct identification of intermolecular attractions • Accurate evaluation of the energy of intermolecular attractions • Appropriate relating to the physical properties of compounds 	
5. Experiment with chemical changes.		<ul style="list-style-type: none"> • Adherence to a scientific procedure, experimental protocol and basic laboratory techniques • Proper use of experimental measurements • Experiment report in keeping with standards 	

Learning Activities

Discipline: Chemistry

Weighting: 3-2-3

Credits: 2 $\frac{2}{3}$

Indications: Atomic structure and properties of the elements. Atomic model, probability model (quantum numbers, orbitals, atomic spectra, configuration); periodic properties (ionization energy, electronic affinity, atomic and ionic radius, electro-negativity); periodic table.
Chemical bonds and molecular structures. Covalent, ionic, metallic and coordinate bonds.
Molecular structures: Lewis structures, hybridation, Gillespie model, resonance.
Molecular interactions: polarity, Van der Waals bonds, hydrogen bonds, states of matter, solubility.
Inorganic and organic compounds: classes and nomenclature.
Chemical reactions. Qualitative aspects: substitution and oxidation-reduction reactions; equation and equilibrium. Quantitative aspects (stoichiometry): molar mass, mole, limiting reagent; law of gases; solution concentration.
Basic technical aspects: measurement, separation and isolating techniques; simple syntheses.

<i>Objective</i>		<i>Standard</i>	
Statement of the Competency		Achievement Context	
Interpret natural phenomena using models from mechanical physics.		<ul style="list-style-type: none"> • Working alone • Working in teams in the laboratory • Using software • Working on a simple problem • Doing written work, or laboratory work leading to a written report 	
Elements of the Competency		Performance Criteria	
1. Describe the phenomenon.		<ul style="list-style-type: none"> • Appropriate use of the terminology • Clear representation of the phenomenon being studied • Identification of observable aspects • Establishment of relationships between the physical parameters and the causes of motion 	
2. Represent the phenomenon in the form of a model.		<ul style="list-style-type: none"> • Identification of relevant variables • Appropriate choice of the principles or laws of physics • Rigorous application of the principles or laws of physics • Construction of a rigorous mathematical solution • Plausible prediction of change in the phenomenon • Evaluation of the limit of the model 	
3. Solve problems associated with the phenomenon.		<ul style="list-style-type: none"> • Clear representation of the situation • Development of a rigorous mathematical solution • Accurate mathematical and graphic representation • Precise application of the mathematical tools • Assessment of the likelihood of the results 	
4. Verify the accuracy of the proposed models.		<ul style="list-style-type: none"> • Clear identification of the goal of the experiment • Adherence to protocol and experimental techniques • Correct use of the laboratory material • Systematic presentation of data, calculations and results • Estimation and rigorous calculation of uncertainties • Correct interpretation of results • Production of a scientific report 	

Learning Activities

Discipline: Physics

Weighting: 3-2-3

Credits: $2\frac{2}{3}$

Indications: One- and two-dimensional kinematics: uniformly accelerated motion, circular motion, projectiles, relative speeds and relative accelerations.
Dynamics: Newtonian laws, inertia, forces, action-reaction, inertial and non-inertial systems, friction.
Principles of conservation: work, kinetic energy, strength, potential gravitational and elastic energy, quantity of movement.

<i>Objective</i>		<i>Standard</i>	
Statement of the Competency		Achievement Context	
Show the importance of historical heritage in the development of Western civilization.		<ul style="list-style-type: none"> • Working with a specific subject • Using all relevant documentation 	
Elements of the Competency		Performance Criteria	
1. Describe the enduring economic, political, social, cultural and ideological components of Western civilization.		<ul style="list-style-type: none"> • Relevant selection of information • Accurate characterization of the components • Appropriate contextualization of the heritage 	
2. Situate features characteristic of Western civilization in time and space.		<ul style="list-style-type: none"> • Precise description of the spatial and temporal context • Accurate placement of the heritage in its context 	
3. Explain structures and ideologies characteristic of Western civilization.		<ul style="list-style-type: none"> • Accurate characterization of structures and ideologies • Establishment of clear and relevant links between structures and ideologies, on the one hand, and historical events, on the other • Clear and logical description of the historical heritage 	
4. Write a research paper on a phenomenon showing continuity and rupture in Western civilization.		<ul style="list-style-type: none"> • Definition of the research topic • Relevant selection of studies on the topic • Proper classification of works • Recognition of the value of documentary sources • Clear and precise formulation of the research question • Relevant synthesis of information 	

<i>Objective</i>		<i>Standard</i>	
Statement of the Competency		Achievement Context	
Consider the influence of individual and social factors on human behaviour.		<ul style="list-style-type: none"> • Working on a specific situation • Using relevant documentation 	
Elements of the Competency		Performance Criteria	
1. Describe the main approaches in explaining human behaviour and mental processes.		<ul style="list-style-type: none"> • Clear differentiation of the main approaches used in psychology • Proper use of concepts and vocabulary 	
2. Characterize personal development and mental health.		<ul style="list-style-type: none"> • Accurate sequence of steps • Relevant description of the processes 	
3. Explain behaviours by referring to biopsychosocial factors.		<ul style="list-style-type: none"> • Appropriate use of the concepts selected • Establishment of accurate links between facts and explanatory factors • Precise and exhaustive description of the phenomenon being studied 	
4. Relate individual behaviours to effects of group-individual interaction.		<ul style="list-style-type: none"> • Accurate description of the influence of social factors on human behaviour 	
5. Verify experimentally a hypothesis about human behaviour.		<ul style="list-style-type: none"> • Precise formulation of a research question • Clear and precise definition of a research objective • Formulation of a relevant and operational hypothesis • Preparation of a measuring instrument with a view to testing the hypothesis • Brief analysis of the results in relation to the hypothesis 	

<i>Objective</i>		<i>Standard</i>	
Statement of the Competency		Achievement Context	
Make a judgment of fact on the dynamics of social change.		<ul style="list-style-type: none"> • Working with a specific problem and a hypothesis • Using all relevant documentation 	
Elements of the Competency		Performance Criteria	
1. Describe social facts underlying the phenomenon being studied.		<ul style="list-style-type: none"> • Identification of the key elements in the context of social relationships • Listing of the main types of social behaviour • Listing of the social agents involved 	
2. Explain social facts, taking into account cultural and structural factors as well as the meaning of the actions of individuals and social groups.		<ul style="list-style-type: none"> • Appropriate use of the concepts selected • Explicit justification of the theoretical framework • Establishment of accurate links between facts, explanatory factors and meanings • Precise and exhaustive description of the phenomenon being studied 	
3. Review the results.		<ul style="list-style-type: none"> • Anticipation of social trends • Position consistent with analysis of the situation 	
4. Write an analysis of a contemporary social phenomenon.		<ul style="list-style-type: none"> • Collection or use of relevant data • Organization of data in keeping with plan of the inquiry • Exhaustive examination of relationships among variables • Evaluation of the hypothesis and research parameters • Writing of the analysis in accordance with a descriptive, explanatory or comprehensive plan 	

<i>Objective</i>		<i>Standard</i>	
Statement of the Competency		Achievement Context	
Deal with current questions associated with the international economy and politics.		<ul style="list-style-type: none"> • Working on a given subject • Using all relevant documentation 	
Elements of the Competency		Performance Criteria	
1. Situate, in time and space, international relations in their political and economic contexts.		<ul style="list-style-type: none"> • Relevant choice of information • Accurate, appropriate chronology of the international relations being studied • Precise description of international political and economic relations 	
2. Characterize global political-economic spaces.		<ul style="list-style-type: none"> • Use of indicators relevant to the geopolitical space being studied • Accurate contextualization of the geopolitical space being studied 	
3. Analyze the process of economic globalization and the strategies employed by the main economic players.		<ul style="list-style-type: none"> • Relevant choice and proper use of concepts • Accurate characterization of the economic processes, strategies and actors • Establishment of clear and relevant links between the processes and the strategies of economic actors • Accurate formulation of the issues associated with economic globalization 	
4. Write an essay on the political and economic dimensions of a current international situation.		<ul style="list-style-type: none"> • Adherence to the topic of the essay • Appropriate use of concepts • Use of appropriate arguments • Justification of critical viewpoint 	

<i>Objective</i>		<i>Standard</i>	
Statement of the Competency		Achievement Context	
Interpret works of art from different periods.		<ul style="list-style-type: none"> • Working alone • Based on national and international works (or parts thereof) from different periods 	
Elements of the Competency		Performance Criteria	
1. Recognize the essential elements of the work.		<ul style="list-style-type: none"> • Accurate identification of means of expression, genres, procedures and tools taken into consideration when analyzing a work of art • Adequate recognition of the similarities and differences of languages 	
2. Situate the work within the context of its own art movement.		<ul style="list-style-type: none"> • Characterization of the most memorable art movements and historical periods • Accurate comparison of the formal and iconographic characteristics of the various art movements • Relation of the work to the specific characteristics of the art movement 	
3. Relate art works to other works in the fields of literary, scientific, technological and humanistic knowledge.		<ul style="list-style-type: none"> • Accurate distinction between the concepts of synchrony and diachrony • Relevant linking of art works with achievements in other fields of knowledge 	
4. Comment on art works from different art movements and time periods.		<ul style="list-style-type: none"> • Relevant information search and analysis • Relation of works to their sociohistorical context • Analysis of the stylistic and thematic characteristics of the works • Correct interpretation of their meaning 	

<i>Objective</i>	<i>Standard</i>
Statement of the Competency	Achievement Context
Create two- and three-dimensional works.	<ul style="list-style-type: none"> • Working on a given subject • Using appropriate materials, tools, equipment and supports • Within the context of an exhibition or a public presentation
Elements of the Competency	Performance Criteria
1. Recognize the elements of visual language.	<ul style="list-style-type: none"> • Differentiation of the visual qualities associated with space, form, matter and colour • Association of the visual qualities of space, form, matter and colour with the work to be produced • Use of descriptive terminology
2. Explore spatial representation techniques.	<ul style="list-style-type: none"> • Characterization of the techniques employed in creating works of art • Safe handling of the tools and equipment • Adherence to the sequence of steps to be taken in accordance with the techniques and procedures selected
3. Apply techniques and modes of spatial representation.	<ul style="list-style-type: none"> • Appropriate use of two- and three-dimensional spatial techniques • Creative use of the materials and supports • Appropriate use of the tools and equipment
4. Justify the choice of technique in relation to the content of the work.	<ul style="list-style-type: none"> • Establishment of relevant links between the idea or concept and the solution adopted • Active participation in the critical analysis of the work • Demonstration of openness to criticism • Indication of the historical and artistic contexts of the creative process

<i>Objective</i>		<i>Standard</i>	
Statement of the Competency		Achievement Context	
Demonstrate their integration of the learning in the <i>Arts and Sciences</i> program.		<ul style="list-style-type: none"> • In the context of an individual or group project • During a public presentation 	
Elements of the Competency		Performance Criteria	
1. Become aware of what they have learned.		<ul style="list-style-type: none"> • Meaningful summary of what they have learned 	
2. Apply what they have learned in new situations.		<ul style="list-style-type: none"> • Appropriate choice of learning in accordance with the achievement contexts • Appropriate application of learning 	
3. Carry out an original project that integrates what they have learned.		<ul style="list-style-type: none"> • Adequate integration of subjects in the three fields of knowledge • Reference to the appropriate historical or theoretical context • Novelty of the situation • Indication of links between the project and their personal, social and professional objectives • Consideration of project constraints • Communication of relevant information on the outcome of the project 	
4. Evaluate their process of integration.		<ul style="list-style-type: none"> • Precise description of the process used in their integration project • Indication of the learning considered important in solving problems encountered in carrying out the project • Appropriate analysis of the strengths and weaknesses of the project • Appropriate indication of repercussions of the project 	

<i>Objective</i>	<i>Standard</i>
Statement of the Competency	Achievement Context
Interpret natural phenomena using the laws of electricity and magnetism.	<ul style="list-style-type: none"> • Working alone • Working in teams in the laboratory • Using software • Working on a simple problem • Doing written work, or laboratory work leading to a written report
Elements of the Competency	Performance Criteria
1. Describe the phenomenon.	<ul style="list-style-type: none"> • Appropriate use of the terminology • Clear outline of the phenomenon being studied • Identification of the observable aspects • Establishment of relationships between the physical parameters and the causes of the phenomenon
2. Create a model to represent the phenomenon.	<ul style="list-style-type: none"> • Identification of the relevant variables • Appropriate choice of the principles or laws of physics • Rigorous application of the principles or laws of physics • Construction of a rigorous mathematical solution • Plausible prediction of change in the phenomenon • Evaluation of the limits of the model
3. Solve problems associated with the phenomenon.	<ul style="list-style-type: none"> • Clear representation of the situation • Development of a rigorous mathematical solution • Correct mathematical and graphic representation • Accurate application of mathematical tools • Assessment of the likelihood of the results
4. Verify models experimentally.	<ul style="list-style-type: none"> • Clear identification of the goal of the experiment • Adherence to experimental protocol and techniques • Correct use of the laboratory material • Systematic presentation of data, calculations and results • Estimation and rigorous calculation of uncertainties • Correct interpretation of results • Production of a scientific report

<i>Objective</i>		<i>Standard</i>	
Statement of the Competency		Achievement Context	
Interpret natural phenomena using optics, wave physics and modern physics.		<ul style="list-style-type: none"> • Working alone • Working in teams in the laboratory • Using software • Working on a simple problem • Doing written work, or laboratory work leading to a written report 	
Elements of the Competency		Performance Criteria	
1. Describe the phenomenon.		<ul style="list-style-type: none"> • Appropriate use of the terminology • Clear outline of the phenomenon being studied • Identification of the observable aspects • Establishment of relationships between the physical parameters and the causes of the phenomenon 	
2. Create a model to represent the phenomenon.		<ul style="list-style-type: none"> • Identification of the relevant variables • Appropriate choice of the principles or laws of physics • Rigorous application of the principles or laws of physics • Construction of a rigorous mathematical solution • Plausible prediction of change in the phenomenon • Evaluation of the limits of the model 	
3. Solve problems associated with the phenomenon.		<ul style="list-style-type: none"> • Clear representation of the situation • Development of a rigorous mathematical solution • Correct mathematical and graphic representation • Accurate application of mathematical tools • Assessment of the likelihood of the results 	
4. Verify models experimentally.		<ul style="list-style-type: none"> • Clear identification of the goal of the experiment • Adherence to experimental protocol and techniques • Correct use of the laboratory material • Systematic presentation of data, calculations and results • Estimation and rigorous calculation of uncertainties • Correct interpretation of results • Production of a scientific report 	

<i>Objective</i>	<i>Standard</i>
Statement of the Competency	Achievement Context
Analyze the mechanisms of reactions.	<ul style="list-style-type: none"> • Working alone • Using the periodic table and software • Following a safe operating procedure in the laboratory • Writing a report
Elements of the Competency	Performance Criteria
1. Describe aspects of solubilization, kinetics and the state of equilibrium of a chemical phenomenon.	<ul style="list-style-type: none"> • Appropriate use of the principles of solubilization • Proper application of the laws of reaction time • Accurate interpretation of the laws of chemical equilibrium
2. Analyze the three-dimensional structures of organic compounds.	<ul style="list-style-type: none"> • Clear differentiation between different types of isomerisms • Appropriate designation of simple polyfunctional compounds • Correct noting of instrumental methods used to determine the structure of organic compounds
3. Analyze the reactivity of the main organic functions.	<ul style="list-style-type: none"> • Correct relation of the structure and reactivity of organic compounds • Accurate description of the main classes of organic reactions • Precise determination of the main electronic effects • Proper application of the main types of reaction mechanisms • Correct relation of the organic functions and chemical transformations in living organisms
4. Test reactivity mechanisms.	<ul style="list-style-type: none"> • Adherence to a scientific procedure and experimental protocol • Mastery of the techniques of organic analysis • Proper use of experimental methods • Experiment report consistent with standards

<i>Objective</i>		<i>Standard</i>	
Statement of the Competency		Achievement Context	
Analyze, from an evolutionary perspective, the adaptation of multicellular organisms to their environment.		<ul style="list-style-type: none"> • Working alone • Working in teams in the laboratory • Using software • Doing written work, or laboratory work leading to a written report 	
Elements of the Competency		Performance Criteria	
1. Apply systematic analysis to the physiological processes of organisms.		<ul style="list-style-type: none"> • Accurate description of the structures and functions of an organism's subsystems 	
2. Explain the regulatory processes that ensure the autonomy of organisms.		<ul style="list-style-type: none"> • Descriptive explanation of regulatory behaviours in terms of internal and external variables • Accurate description of certain reproductive processes 	
3. Demonstrate the contribution of the theory of evolution to the understanding of the variability of life forms.		<ul style="list-style-type: none"> • Detailed interpretation of the environment's influence on the evolution of life forms 	
4. Analyze the influence of abiotic and biotic factors on the physiology of organisms.		<ul style="list-style-type: none"> • Recognition of interactions between organisms and ecosystems • Precise determination of the limits of physiological adaptability 	
5. Verify experimentally certain phenomena associated with multicellular organisms' adaptation to their environment.		<ul style="list-style-type: none"> • Adherence to experimental protocol • Appropriate relation of a hypothesis to its validation through either observation or experimentation • Proper presentation of a report on the results obtained and on their interpretation 	

<i>Objective</i>		<i>Standard</i>	
Statement of the Competency		Achievement Context	
Create a work of art.		<ul style="list-style-type: none"> • Working alone or in groups • Doing a practical exercise • In a situation involving creation or interpretation 	
Elements of the Competency		Performance Criteria	
1. Recognize the main means of expression specific to two or more artistic disciplines.		<ul style="list-style-type: none"> • Identification of the specifics: originality, essential qualities, means of communication, styles, genres 	
2. Use techniques, procedures and languages with a view to creating or interpreting a work of art.		<ul style="list-style-type: none"> • Personal and consistent use of the elements of the language • Appropriate application of art techniques • Adherence to the requirements of the medium 	

Objective		Standard	
Statement of the Competency		Achievement Context	
Discuss major problems of our time using more than one approach from the social sciences.		<ul style="list-style-type: none"> • Based on documentation from several of the social sciences 	
Elements of the Competency		Performance Criteria	
1. State a problem.		<ul style="list-style-type: none"> • Use of the appropriate concepts and language • Explicit justification of the theoretical framework • Clear statement of a question 	
2. Analyze the problem.		<ul style="list-style-type: none"> • Selection of relevant data from documents • Description of the individual, collective, spatio-temporal and cultural dimensions of the problem • Establishment of clear and relevant links • Accurate statement of the issues 	
3. Draw conclusions.		<ul style="list-style-type: none"> • Determination of the appropriate assessment criteria • Recognition of the strengths and weaknesses of the conclusions • Broadening of the question under analysis 	

<i>Objective</i>	<i>Standard</i>
Statement of the Competency	Achievement Context
Communicate at a rudimentary level in a modern language.	<ul style="list-style-type: none"> • For modern Latin-alphabet languages: <ul style="list-style-type: none"> ○ during a conversation consisting of at least eight lines of dialogue ○ in a written text consisting of at least eight sentences • For modern non–Latin-alphabet languages: <ul style="list-style-type: none"> ○ during a conversation consisting of at least six lines of dialogue ○ in a written text consisting of at least six sentences • Based on learning situations on familiar themes • Using reference materials
Elements of the Competency	Performance Criteria
1. Grasp the meaning of an oral message.	<ul style="list-style-type: none"> • Correct identification of idiomatic words and expressions • Explicit recognition of the general meaning of simple messages • Logical linking of the elements of the message
2. Grasp the meaning of a written message.	<ul style="list-style-type: none"> • Correct identification of idiomatic words and expressions • Explicit recognition of the general meaning of simple messages • Logical linking of the elements of the message
3. Explain a simple message orally.	<ul style="list-style-type: none"> • Correct use of language structures in main and subordinate clauses • Appropriate application of the grammatical rules • Correct use of verbs in the present indicative • Appropriate use of basic vocabulary and idiomatic expressions • Intelligible pronunciation • Logical linking of a series of simple sentences • Spontaneous and logical linking of sentences in a dialogue
4. Write a text on a given topic.	<ul style="list-style-type: none"> • Appropriate use of language structures in main and subordinate clauses • Appropriate application of the basic rules of grammar • Use of verbs in the present indicative • Appropriate use of basic vocabulary and idiomatic expressions • Logical linking of a series of simple sentences • Acceptable application of the typographic rules for systems of writing other than the Roman alphabet

Program-Specific Component
Optional Objectives and Standards

Learning Activities

Note: The acquisition of a modern language requires an awareness of the culture of its native speakers.
“Rudimentary” refers to the limited use of linguistic structures, grammatical codes and vocabulary. This limitation varies in accordance with the problems posed by some modern languages.

<i>Objective</i>	<i>Standard</i>
Statement of the Competency	Achievement Context
Communicate on familiar subjects in a modern language.	<ul style="list-style-type: none"> • During a conversation that includes at least 15 lines of dialogue • In a written text consisting of at least 20 sentences for Latin-alphabet languages • In a written text consisting of at least 10 sentences for non-Latin-alphabet languages • Based on: <ul style="list-style-type: none"> ○ common situations in everyday life ○ simple topics from everyday life • Using reference materials
Elements of the Competency	Performance Criteria
1. Grasp the meaning of an oral message.	<ul style="list-style-type: none"> • Correct identification of idiomatic words and expressions • Explicit recognition of the general meaning and essential ideas of messages of medium complexity • Logical linking of the elements of the message
2. Grasp the meaning of a written message.	<ul style="list-style-type: none"> • Correct identification of idiomatic words and expressions • Explicit recognition of the general meaning and essential ideas of messages of medium complexity • Logical linking of the elements of the message
3. Express a simple message orally using moderately complex sentences.	<ul style="list-style-type: none"> • Appropriate use of language structures in main or subordinate clauses • Appropriate application of the grammatical rules • Correct use of verbs in the present indicative • Appropriate use of an enriched basic vocabulary and idiomatic expressions • Intelligible pronunciation • Logical linking of a series of moderately complex sentences • Dialogue
4. Write a text on a given subject using moderately complex sentences.	<ul style="list-style-type: none"> • Appropriate use of language structures in main or subordinate clauses • Appropriate application of the grammatical rules • Correct use of verbs in the present and past indicative • Appropriate use of an enriched basic vocabulary and idiomatic expressions • Logical linking of a series of moderately complex sentences • Acceptable application of the writing rules for systems other than the Roman alphabet

Program-Specific Component
Optional Objectives and Standards

Learning Activities

Note: The acquisition of a modern language requires an awareness of the culture of its native speakers.

<i>Objective</i>		<i>Standard</i>	
Statement of the Competency		Achievement Context	
Communicate with a certain degree of ease in a modern language.		<ul style="list-style-type: none"> • Working alone • During a conversation consisting of at least 20 lines of dialogue • In a written text of medium length (at least 25 sentences for Latin-alphabet languages and 15 sentences for other languages) • Given documents of a sociocultural nature • Using reference materials for the written text 	
Elements of the Competency		Performance Criteria	
1. Elucidate the meaning of an oral message in current language.		<ul style="list-style-type: none"> • Accurate explanation of the general meaning and essential ideas of the message • Clear differentiation of the structural features of the language 	
2. Elucidate the meaning of a moderately complex text.		<ul style="list-style-type: none"> • Accurate explanation of the general meaning and essential ideas of the text • Clear differentiation of the structural features of the language 	
3. Discuss a subject.		<ul style="list-style-type: none"> • Appropriate use of the structural features of the language in accordance with the message to be conveyed • Appropriate use of current vocabulary • Proper pronunciation and intonation • Moderate pace in a dialogue conducted in a current language • Coherence of the message • Relevant answers to questions 	
4. Write a text of moderate complexity.		<ul style="list-style-type: none"> • Appropriate use of the structural features of the language in accordance with the text to be written • Accuracy of vocabulary • Overall coherence of the text • Adherence to the rules governing the presentation and writing of the text 	
Learning Activities			
Note:		The acquisition of a modern language requires an awareness of the culture of its native speakers.	

General Education Component Common to All Programs and General Education Component Specific to the Program

English, Language of Instruction and Literature		Code: 4EA0
<i>Objective</i>	<i>Standard</i>	
Statement of the Competency		
Analyze and produce various forms of discourse.		
Elements of the Competency	Performance Criteria	
1. Identify the characteristics and functions of the components of literary texts.	<ul style="list-style-type: none"> • Accurate explanation of the denotation of words • Adequate recognition of the appropriate connotation of words • Accurate definition of the characteristics and function of each component 	
2. Determine the organization of facts and arguments of a given literary text.	<ul style="list-style-type: none"> • Clear and accurate recognition of the main idea and structure • Clear presentation of the strategies employed to develop an argument or thesis 	
3. Prepare ideas and strategies for a projected discourse.	<ul style="list-style-type: none"> • Appropriate identification of topics and ideas • Adequate gathering of pertinent information • Clear formulation of a thesis • Coherent ordering of supporting material 	
4. Formulate a discourse.	<ul style="list-style-type: none"> • Appropriate choice of tone and diction • Correct development of sentences • Clear and coherent development of paragraphs • Formulation of a 750-word discourse 	
5. Revise the work.	<ul style="list-style-type: none"> • Appropriate use of revision strategies • Appropriate revision of form and content 	
Learning Activities		
Discipline:	English, Language of Instruction and Literature	
Weighting:	2-2-4 or 1-3-4	
Credits:	2½	

Objective

Standard

Statement of the Competency

Apply an analytical approach to literary genres.

Elements of the Competency

Performance Criteria

1. Distinguish genres of literary texts.	<ul style="list-style-type: none"> • Clear recognition of the formal characteristics of a literary genre
2. Recognize the use of literary conventions within a specific genre.	<ul style="list-style-type: none"> • Accurate recognition of the figurative communication of meaning • Adequate explanation of the effects of significant literary and rhetorical devices
3. Situate a work within its historical and literary period.	<ul style="list-style-type: none"> • Appropriate recognition of the relationship of a text to its period
4. Write a critical analysis of a literary genre.	<ul style="list-style-type: none"> • Selective use of appropriate terminology • Effective presentation of a 1000-word coherent response to a literary text
5. Revise the work.	<ul style="list-style-type: none"> • Appropriate use of revision strategies • Appropriate revision of form and content

Learning Activities

Discipline: English, Language of Instruction and Literature
Weighting: 2-2-3
Credits: 2½

Objective

Standard

Statement of the Competency

Apply an analytical approach to a literary theme.

Elements of the Competency

Performance Criteria

1. Recognize the treatment of a theme within a literary text.	<ul style="list-style-type: none"> • Clear recognition of elements within the text, which define and reinforce a theme and its development • Adequate demonstration of the effects of significant literary and rhetorical devices
2. Situate a literary text within its cultural context.	<ul style="list-style-type: none"> • Appropriate recognition of a text as an expression of cultural context • Adequate demonstration of the effects of significant literary and rhetorical devices
3. Detect the value system inherent in a literary text.	<ul style="list-style-type: none"> • Appropriate identification of expression (explicit / implicit) of a value system in a text
4. Write an analysis on a literary theme.	<ul style="list-style-type: none"> • Selective use of appropriate terminology • Effective presentation of a 1000-word coherent response to a literary text
5. Revise the work.	<ul style="list-style-type: none"> • Appropriate use of revision strategies • Appropriate revision of form and content

Learning Activities

Discipline: English, Language of Instruction and Literature
Weighting: 2-2-3
Credits: 2½

Objective

Standard

Statement of the Competency

Communicate in the forms of discourse appropriate to one or more fields of study.

Elements of the Competency

Performance Criteria

1. Identify the forms of discourse appropriate to given fields of study.	<ul style="list-style-type: none"> • Accurate recognition of specialized vocabulary and conventions • Accurate recognition of the characteristics of the form of discourse • Exploration of a variety of topics
2. Recognize the forms of discourse appropriate to given fields of study.	<ul style="list-style-type: none"> • Clear and accurate recognition of the main ideas and structure • Appropriate distinction between fact and argument
3. Formulate an oral and a written discourse.	<ul style="list-style-type: none"> • Examine ways to address and structure a given topic • Appropriate choice of tone and diction • Correctly developed sentences • Clearly and coherently developed paragraphs • Appropriate use of program-related communication strategies including media and technology • Formulation of a 1000-word discourse
4. Revise the work.	<ul style="list-style-type: none"> • Appropriate use of revision strategies • Appropriate revision of form and content

Learning Activities

Discipline: English, Language of Instruction and Literature
 Periods of instruction: 60
 Credits: 2

General Education Component Common to All Programs
and General Education Component Specific to the Program

Humanities

Code: 4HU0

Objective

Standard

Statement of the Competency

Apply a logical analytical process to how knowledge is organized and used.

Elements of the Competency

Performance Criteria

1. Recognize the basic elements of a field of knowledge.	<ul style="list-style-type: none"> • Appropriate description of the basic elements • Appropriate use of terminology relevant to a field of knowledge
2. Define the modes of organization and utilization of a field of knowledge.	<ul style="list-style-type: none"> • Adequate definition of the dimensions, limits, and uses of a field of knowledge
3. Situate a field of knowledge within its historical context.	<ul style="list-style-type: none"> • Accurate identification of the main components in the historical development of a field of knowledge • Accurate description of the effects of historical development and social context on the limits and uses of a field of knowledge
4. Organize the main components into coherent patterns.	<ul style="list-style-type: none"> • Coherent organization of the main components
5. Produce a synthesis of the main components.	<ul style="list-style-type: none"> • Appropriate analysis of the components • Coherent synthesis of the main components • Appropriate expression, including a significant individual written component, of an analysis of the context, importance and implications of the organization and uses of knowledge • Appropriate use of revision strategies • Appropriate revision of form and content

Learning Activities

Discipline: Humanities
Weighting: 2-1-3 or 3-1-3
Credits: 2 or 2½

Objective

Standard

Statement of the Competency

Apply a critical thought process to world views.

Elements of the Competency

Performance Criteria

1. Describe world views.	<ul style="list-style-type: none"> • Accurate description of a society or group with a distinctive world view • Appropriate use of terminology relevant to these societies or groups
2. Explain the major ideas, values, and implications associated with a given world view.	<ul style="list-style-type: none"> • Adequate explanation of the salient components of a world view
3. Organize the ideas, values and experiences of a world view into coherent patterns.	<ul style="list-style-type: none"> • Coherent organization of ideas about a world view • Appropriate expression, including a significant individual written component, of an analysis of the context, importance, and implications of world views
4. Compare world views.	<ul style="list-style-type: none"> • Comparative analysis of these world views • Appropriate inclusion of central elements, relationships, and organizational principles of the societies or groups in the analysis
5. Convey the ideas, attitudes, and experiences of the societies or groups studied.	<ul style="list-style-type: none"> • Coherent integration of the importance and implications of the world views for the given societies or groups • Appropriate use of revision strategies • Appropriate revision of form and content

Learning Activities

Discipline: Humanities
Weighting: 3-0-3
Credits: 2

Objective

Standard

Statement of the Competency

Apply a critical thought process to ethical issues relevant to the field of study.

Elements of the Competency

Performance Criteria

1. Situate significant ethical issues in appropriate world views and fields of knowledge.	<ul style="list-style-type: none"> • Accurate recognition of the basic elements of ethical issues • Appropriate use of relevant terminology • Adequate identification of the main linkages with world views and fields of knowledge
2. Explain the major ideas, values, and social implication of ethical issues.	<ul style="list-style-type: none"> • Adequate description of the salient components of the issues
3. Organize the ethical questions and their implications into coherent patterns.	<ul style="list-style-type: none"> • Coherent organization of the ethical questions and their implications • Appropriate expression, including a significant individual written component, of an analysis of the context, importance and implications of the issues
4. Debate the ethical issues.	<ul style="list-style-type: none"> • Adequate development of substantiated argumentation including context and diverse points of view • Clear articulation of an individual point of view • Appropriate use of revision strategies • Appropriate revision of form and content

Learning Activities

Discipline:	Humanities
Periods of instruction:	45
Credits:	2

Objective

Standard

Statement of the Competency

Apply basic concepts for communicating in standard French.

Elements of the Competency

Performance Criteria

1. Write and revise a simple text.

- Clear, coherent formulation of a text of about 250 words
- Adequate development of the text: intention, topic, reader
- Formulation of simple, well-constructed sentences
- Use of adequate vocabulary for the task
- Satisfactory application of the rules of grammar, in particular agreement in gender and number; regular verbs; verb tenses in the present, compound past and simple future
- Satisfactory correction of errors in spelling or grammar
- Appropriate use of revision strategies

2. Understand the meaning of a simple text.

- Accurate description of the general meaning and essential ideas of a 500-word text
- Accurate identification of the difficulties in understanding the text
- Appropriate use of reading techniques
- Accurate identification of the main elements of the text

3. Convey a simple oral message.

- Clear and coherent formulation of an oral presentation of at least four minutes
- Appropriate use of standard vocabulary
- Clear and coherent statements

4. Understand the meaning of a simple oral message.

- Accurate identification of the general meaning and essential ideas of an oral message of at least four minutes
- Accurate identification of the difficulties in understanding the message
- Accurate description of the general meaning and essential ideas of the message

Learning Activities

Discipline: French as a Second Language

Weighting: 2-1-3

Credits: 2

Objective

Standard

Statement of the Competency

Communicate in standard French with some ease.

Elements of the Competency

Performance Criteria

1. Write and revise a simple text.

- Writing of a text of about 350 words
- Respect for grammar and spelling rules
- Appropriate use of the main elements of the corpus
- Clear, coherent formulation of sentences
- Coherent organization of paragraphs
- Appropriate use of revision strategies
- Satisfactory correction of spelling and grammatical errors

2. Interpret a written text.

- Accurate identification of the main ideas and structure of a text of 700 to 1 000 words
- Accurate identification of the main elements of the text
- Accurate explanation of the meaning of the words of the text

3. Produce a planned oral text.

- Clear and coherent formulation of an oral presentation of at least five minutes
- Appropriate use of standard vocabulary
- Respect for the level of language and rules of grammar and pronunciation

4. Interpret a simple oral text.

- Accurate identification of the main elements of an oral text of at least five minutes
- Accurate identification of the ideas and subjects dealt with in the text
- Accurate explanation of the meaning of the words of the text

Learning Activities

Discipline: French as a Second Language

Weighting: 2-1-3

Credits: 2

Objective

Standard

Statement of the Competency

Communicate with ease in standard French.

Elements of the Competency

Performance Criteria

<p>1. Write a text of moderate complexity.</p>	<ul style="list-style-type: none"> • Writing of a text of about 450 words • Respect for grammar and spelling rules • Adaptation to the intended audience • Appropriate use of the main elements of the corpus • Clear and coherent formulation of sentences, including at least three that are complex • Coherent organization of paragraphs
<p>2. Revise and correct a text of moderate complexity.</p>	<ul style="list-style-type: none"> • Appropriate use of revision strategies • Appropriate revision of the text
<p>3. Comment on a written text of moderate complexity.</p>	<ul style="list-style-type: none"> • Accurate identification of the main elements of a text of between 2 500 and 3 000 words • Accurate explanation of the meaning of the words of the text • Accurate identification of the main and secondary ideas, of facts and opinions • Accurate identification of what is implicit and what is explicit
<p>4. Produce a planned oral text of moderate complexity.</p>	<ul style="list-style-type: none"> • Clear and coherent formulation of an oral presentation of at least five minutes • Appropriate use of standard vocabulary • Respect for the level of language and rules of grammar and pronunciation • Adaptation to the intended audience • Appropriate sequencing of ideas

Learning Activities

Discipline: French as a Second Language

Weighting: 2-1-3

Credits: 2

Objective

Standard

Statement of the Competency

Explore a cultural and literary topic.

Elements of the Competency

Performance Criteria

1. Write a text on a cultural or literary topic.

- Clear and coherent formulation of a text of about 550 words
- Respect for the topic
- Respect for grammar and spelling rules
- Adaptation to the intended audience
- Appropriate use of the main elements of the corpus
- Clear articulation of a personal point of view

2. Revise and correct a text on a cultural or literary topic.

- Appropriate use of revision strategies
- Appropriate revision of the text

3. Analyze a cultural or literary text.

- Personal formulation of the main elements of the text
- Identification of the main themes
- Identification of clues that help situate the text in its sociocultural and historical context
- Accurate identification of the values expressed
- Accurate identification of the structure of the text
- Clear articulation of a personal point of view

Learning Activities

Discipline: French as a Second Language

Weighting: 3-0-3

Credits: 2

Objective

Standard

Statement of the Competency

Apply basic concepts for communicating in French in relation to the student's field of study.

Elements of the Competency

Performance Criteria

<p>1. Write and revise a short text related to the student's field of study.</p>	<ul style="list-style-type: none"> • Accurate identification of difficulties in writing • Appropriate use of writing techniques • Appropriate use of standard and specialized vocabulary • Clear and coherent formulation of the text • Appropriate use of revision strategies • Satisfactory correction of spelling and grammatical errors
<p>2. Understand the meaning and characteristics of a text related to the student's field of study.</p>	<ul style="list-style-type: none"> • Accurate identification of difficulties in understanding the text • Accurate identification of the characteristics of the text • Accurate identification of specialized vocabulary • Accurate identification of the main elements of the text • Accurate description of the general meaning and essential ideas of the text
<p>3. Convey a simple oral message related to the student's field of study.</p>	<ul style="list-style-type: none"> • Accurate identification of the difficulties in oral expression • Appropriate use of techniques of oral expression • Appropriate use of standard and specialized vocabulary • Intelligible expression of the message
<p>4. Understand the meaning of a simple oral message related to the student's field of study.</p>	<ul style="list-style-type: none"> • Accurate identification of difficulties in understanding the message • Accurate identification of the characteristics of the message • Accurate identification of specialized vocabulary • Accurate identification of the main elements of the message • Accurate description of the general meaning and essential ideas of the message

Learning Activities

Discipline:	French as a Second Language
Periods of instruction:	45
Credits:	2

Objective

Standard

Statement of the Competency

Communicate in French on topics related to the student's field of study.

Elements of the Competency

Performance Criteria

1. Write a text related to the student's field of study.	<ul style="list-style-type: none"> • Appropriate use of specialized vocabulary and of conventions specific to different types of texts • Respect for the level of language and rules of grammar and spelling • Clear and coherent formulation of the text • Appropriate use of writing techniques
2. Revise and correct a text on a topic related to the student's field of study.	<ul style="list-style-type: none"> • Appropriate use of revision strategies • Satisfactory correction of spelling and grammatical errors
3. Differentiate the types of texts specific to the student's field of study.	<ul style="list-style-type: none"> • Accurate identification of the formal characteristics of each of the main types of texts and the conventions used
4. Analyze texts representative of the student's field of study.	<ul style="list-style-type: none"> • Accurate identification of the main elements of the text • Accurate interpretation of specialized vocabulary • Accurate identification of the ideas and subjects dealt with • Appropriate use of reading and listening techniques

Learning Activities

Discipline:	French as a Second Language
Periods of instruction:	45
Credits:	2

Objective

Standard

Statement of the Competency

Communicate with ease in French on topics related to the student's field of study.

Elements of the Competency

Performance Criteria

<p>1. Produce a text on a topic related to the student's field of study.</p>	<ul style="list-style-type: none"> • Respect for the topic • Appropriate use of specialized vocabulary and the conventions specific to different types of texts • Respect for the level of language and rules of grammar and spelling • Clear and coherent formulation of the text • Appropriate sequencing of ideas • Appropriate form for the content
<p>2. Revise and correct a text on a topic related to the student's field of study.</p>	<ul style="list-style-type: none"> • Appropriate use of revision strategies • Satisfactory correction of spelling and grammatical errors
<p>3. Comment on texts specific to the student's field of study.</p>	<ul style="list-style-type: none"> • Accurate identification of the formal characteristics of the main types of texts and the conventions used • Accurate explanation of the meaning of the words in the text • Accurate identification of the structure of the text • Accurate reformulation of the main and secondary ideas, of the facts and opinions • Accurate use of specialized vocabulary

Learning Activities

Discipline:	French as a Second Language
Periods of instruction:	45
Credits:	2

General Education Component Common to All Programs
and General Education Component Specific to the Program

French as a Second Language (Level IV)

Code: 4SFS

Objective

Standard

Statement of the Competency

Produce a text in French on a topic related to the student's field of study.

Elements of the Competency

Performance Criteria

<p>1. Write a text on a topic related to the student's field of study.</p>	<ul style="list-style-type: none"> • Respect for the topic • Appropriate use of specialized vocabulary and the conventions specific to different types of texts • Appropriate choice of the main elements of the corpus based on the type of text • Clear and coherent formulation of the text • Respect for the level of language and rules of grammar and spelling • Clear articulation of a personal point of view
<p>2. Revise and correct a text on a topic related to the student's field of study.</p>	<ul style="list-style-type: none"> • Appropriate use of revision strategies • Satisfactory correction of spelling and grammatical errors
<p>3. Analyze a text related to the student's field of study.</p>	<ul style="list-style-type: none"> • Precise differentiation of the formal characteristics of specific types of texts • Personal formulation of the main elements • Listing of the main themes • Accurate identification of the structure of the text • Identification of clues that help situate the text in its context • Clear articulation of a personal point of view • Accurate association of elements of the text with the topic

Learning Activities

Discipline:	French as a Second Language
Periods of instruction:	45
Credits:	2

Objective

Standard

Statement of the Competency

Analyze one's physical activity from the standpoint of a healthy lifestyle.

Elements of the Competency

Performance Criteria

1. Establish the relationship between one's lifestyle habits and health.	<ul style="list-style-type: none"> • Proper use of documentation from scientific research or the media • Recognition of the influence of social and cultural factors on the practice of physical activity • Pertinent links made between one's lifestyle habits and the impact they have on health
2. Be physically active in a manner that promotes one's health.	<ul style="list-style-type: none"> • Respect for the rules specific to the physical activity practised • Respect for codes of ethics, safety rules and regulations when being physically active • Respect for one's abilities when practising physical activities
3. Recognize one's needs, abilities and motivational factors with respect to regular and sufficient physical activity.	<ul style="list-style-type: none"> • Appropriate use of strategies for the quantitative and qualitative evaluation of one's physical condition • Overall assessment of one's needs and abilities in terms of physical activity • Overall assessment of one's motivational factors with respect to being sufficiently active on a regular basis
4. Propose physical activities that promote one's health.	<ul style="list-style-type: none"> • Appropriate choice of physical activities according to one's needs, abilities and motivational factors • Use of clear reasoning to explain the choice of physical activity

Learning Activities

Discipline: Physical Education
Weighting: 1-1-1
Credits: 1

Objective

Standard

Statement of the Competency

Improve one's effectiveness when practising a physical activity.

Elements of the Competency

Performance Criteria

- | Elements of the Competency | Performance Criteria |
|---|---|
| 1. Plan an approach to improve one's effectiveness when practising a physical activity. | <ul style="list-style-type: none"> • Initial assessment of one's abilities and attitudes when practising a physical activity • Statement of one's expectations and needs with respect to the ability to practise the activity • Appropriate formulation of personal objectives • Appropriate choice of the means to achieve one's objectives • Use of clear reasoning to explain the choice of physical activity |
| 2. Use a planned approach to improve one's effectiveness when practising a physical activity. | <ul style="list-style-type: none"> • Respect for the rules and regulations of the physical activity • Respect for codes of ethics, safety rules and regulations when being physically active • Appropriate use of strategies for the quantitative and qualitative evaluation of one's motor skills • Periodic assessment of one's abilities and attitudes when practising a physical activity • Meaningful interpretation of progress made and the difficulties encountered in the practice of physical activity • Pertinent, periodic and proper adjustments of one's objectives or means • Appreciable improvement in one's motor skills, techniques or complex strategies required by the physical activity |

Learning Activities

Discipline: Physical Education
Weighting: 0-2-1
Credits: 1

Objective

Standard

Statement of the Competency

Demonstrate one's ability to assume responsibility for maintaining a healthy lifestyle through the continued practice of physical activity.

Elements of the Competency

Performance Criteria

1. Plan a personal physical activity program.

- Mention of priorities according to one's needs, abilities, and motivational factors with respect to being sufficiently active on a regular basis
- Proper and appropriate formulation of personal objectives
- Appropriate choice of physical activity or activities to achieve personal objectives
- Appropriate planning of the conditions for performing the physical activity or activities in personal program

2. Combine the elements of a regular and sufficient practice of physical activity as part of a healthy lifestyle.

- Respect for the rules and regulations of the physical activity
- Respect for codes of ethics, safety rules and regulations when being physically active
- Regular and sufficient practice of a physical activity while maintaining a balance between effectiveness and health-promoting factors

3. Manage a personal physical activity program.

- Appropriate choice of criteria for measuring the attainment of program objectives
- Appropriate use of strategies for the quantitative and qualitative evaluation of one's physical activity
- Periodic assessment of the time invested and activities practised during the program
- Appropriate, periodic and proper adjustment of personal objectives or means used
- Meaningful interpretation of the progress made and difficulties encountered in the practice of physical activities
- Recognition of the effect of physical activity on one's lifestyle

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Additional Information

Key Terms Used in Pre-University Programs

Program

A program is an integrated set of learning activities leading to the achievement of educational objectives based on set standards.

Aim

The aim encompasses all of the academic fields identified in a pre-university program in order to prepare students for university. As a whole, the elements of a program—i.e. the aims of college education, common competencies, goals, objectives and standards—help students meet the educational requirements of these academic fields.

Goals

The goals of a pre-university program highlight what the students should learn. Program goals contribute to program coherence, which in turn promotes the integration and transfer of learning. They are in keeping with the program-based approach in that they serve to harmonize the program-specific and the general education components, and give concrete expression to the aim of the program.

Competency

A competency is the ability to act. It includes knowledge, skills and attitudes and refers to the student's demonstrated ability to use his or her knowledge and skills in a given situation.

Objectives

The objectives of pre-university programs determine the results expected of the students. It is by attaining objectives and meeting set standards that the students master the college-level competencies that are deemed essential to successful university studies. In pre-university programs, each objective is formulated in terms of a statement of the competency and its elements.

Standard

A standard is the level of performance at which an objective is considered to be achieved. It is by attaining objectives and meeting the required standards that the students master the college-level competencies that are deemed essential to successful university studies. In pre-university programs, each standard is formulated in terms of performance criteria.

Statement of the competency

The statement of the competency specifies the overall training objective associated with a competency; it is based on expectations identified in an analysis of university education and general education needs.

Elements of the competency

The elements specify the essential components of a competency. They include only what is necessary in order to understand and develop the competency.

Performance criteria

The performance criteria define the requirements for recognition of attainment of a standard. They are not an evaluation framework *per se*, but may serve to develop one. Performance criteria must be taken into account in the evaluation of competency development.

Learning activities

The aspects of learning activities that the Minister can determine, in whole or in part, in a pre-university program include: the field of studies, the discipline(s), the course weighting, the number of periods of instruction, the number of credits, and such specific indications as are deemed essential.

Common objectives and standards

Common objectives and standards determine the core learning content for pursuing university studies in a given field, no matter what specialization a student may have taken.

Objectives and standards of an option

The objectives and standards of an option expose students to an academic field in order to guide them in their university course selection.

Optional objectives and standards

Optional objectives and standards may or may not be implemented by a college. They serve to develop learning activities based on local orientations.

Harmonization of Pre-University Programs and General Education

The harmonization of pre-university programs and general education is part of a lifelong learning approach that makes it easier for college-level students to switch from one pre-university program to another without having to repeat activities for which they have already obtained credit. Additional information on the harmonization of pre-university programs and general education is available on the Ministère's Web site at:

www.education.gouv.qc.ca/en/colleges/etudiants-au-collegial/pre-university-programs.

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