Secondary Education in Canada: A Student Transfer Guide 10th Edition, 2008–2009

Nunavut

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Part 1 – Summary Statement

1. Introduction

Nunavut generally follows Alberta's secondary school system but is working to develop its own system founded on the principles of Inuit Qaujimajatuqangit (Inuit societal principles and values).

In Nunavut, the Department of Education (http://www.gov.nu.ca/education/index.htm) is responsible for programs and services that support early childhood activities, schools, post-secondary education, income support, labour market analysis, student financial assistance, and adult learning. The Department of Education develops and/or approves all curricula used in Nunavut kindergarten to Grade 12 schools and post-secondary institutions. Academic credits are granted by the Department of Education through kindergarten to Grade 12 schools and Nunavut Arctic College.

The Department of Education offers a range of policies, programs, and services to Nunavut residents that encourage and support them to be self-reliant and make productive decisions for themselves and their communities. The Department of Education believes that in order to meet the needs of Nunavut residents, all work must be grounded in Inuit Qaujimajatuqangit—Inuit ways of knowing, being, and doing. This means that the work of the department is based on collaboration with Elders. All work is grounded in consultation and is based on partnerships. Partnerships include educators in schools, the public, community members, Nunavut Arctic College, Inuit and business organizations, other Government of Nunavut departments, and various levels of federal and municipal governments, as well as other educational jurisdictions.

The Department of Education is transforming the school system and adult learning to better reflect the aspirations of the people of Nunavut. The language and culture of Inuit are the basis for teacher training, curriculum and resource development, post-secondary education, and adult training.

2. Organization of School System

The Government of Nunavut is fully committed to redesigning the educational system within the context of Inuit Qaujimajatuqangit to produce graduates who are fully functional bilingual speakers, ready to take advantage of increasing post-secondary and employment opportunities. The *Inuit Qaujimajatuqangit Curriculum Framework (2008)* outlines the direction for the new kindergarten to Grade 12 curriculum and a bilingual delivery system to ensure schools meet government commitments. Courses developed at the secondary level will be modularized to facilitate individual, continuous progress through the various programs. Reorganization of the school system is being phased in over several years and will have implications for secondary courses and graduation requirements.

The school year varies with start dates in early August through September to end dates from early May through June the following year. Individual communities determine the school year that best suits the needs of the families in that community.

District Education Authorities in each community select instructional days for all students within the parameters of the Education Act. The current Act legislates 195 days. Teachers work 195 days that include five professional development days, four in-service days, two administration days, and one orientation day. Student instructional days will generally be 183 days. Some schools may use hours above the required minimum to provide additional inservice. For example, secondary school requires 1000 hours of instructional time; if a school has scheduled 1043 hours, it may use some of the 43 hours to provide an extra in-service day.

Generally, each junior secondary (Grades 7 to 9) subject course is taught once per day for the entire school year, although students may take optional classes that are rotated for shorter periods throughout the year. Senior secondary courses may be timetabled as year-long courses or as half-year semestered courses. In senior secondary schools, courses are generally offered once per year.

Students in junior secondary may begin earning Career and Technology Studies (CTS) credits from Grade 7 onwards. Schools are encouraged to offer work experience CTS prerequisites in the junior secondary years.

Credit towards graduation is based on 25 hours of study per credit. Full courses consist of a minimum of 125 instructional hours for 5 credits. Presently, 100 credits are required for graduation.

3. Explanation of Terms Used*

Junior Secondary School	Grades 7 to 9
Senior Secondary School	Grades 10 to 12

*Note: Including Special Education Terms

Core Courses

These are courses that all students must take in order to graduate. Currently, the core courses are English, mathematics, science, social studies, northern studies, fine arts, physical education, Aulajaaqtut, and career and technology studies.

Specified and Unspecified Credits

Students are expected to complete 73 specified and 27 unspecified credits. They earn the specified credits through prescribed courses. They earn unspecified credits through courses they choose to take in areas of personal interest, for university or college entrance, or for preparation for employment.

Terminology Related to Language Learning

L1 (First Language)

Inuktitut is the first language of the majority of students in Nunavut. Many of them receive their primary years' instruction through the medium of Inuktitut. Teachers using the medium of English for instruction at any level are required to use second-language acquisition strategies in order to facilitate access to curriculum intended for students whose first language is English, such as the programs of study from Alberta.

L2 (Second Language)

English is a second language for the majority of students. The Junior Secondary English Language Arts program acts as a scaffold between English as a second and first language.

Language of Instruction Models

These are different models of bilingual education related to the language of instruction and the proportion of schooling done in an Inuit language, English, or French. Each community decides on its own model.

Terminology Related to Student Support

Individual Education Plan (IEP)

An Individual Education Plan is developed for students who are unable to access the approved curricula. The competencies are determined in accordance with the student's needs. Courses taken on an IEP are identified on the student's transcript.

Individual Accommodation Plan (IAP)

An Individual Accommodation Plan is developed for students who have difficulties accessing the approved curricula. The competencies remain those of the approved curricula, but accommodations such as a scribe, sign language assistant, or extra time to complete the competencies are provided. Accommodations are not identified on the student's transcript.

Individual Behaviour Plan (IBP)

An Individual Behaviour Plan is developed for students who have difficulties with schooling and school work that are attributed to behaviour.

Multiple Graduation Options

Secondary schools in Nunavut will be moving to course offerings in various optional program paths for students. Each optional path consists of a program of courses that allows students to explore an area of specific interest to them. These may include Introduction to Trades and Engineering; Community Care and Family Studies; Fine Arts and Crafts; Heritage, History, and Cultural Studies; Innovation and Technology; or Entrepreneurship and Business Studies. Courses in these programs will provide students with experiential, authentic learning experiences, as well as opportunities for career research. Schools are piloting these courses over the next five years.

4. Course Designation

Nunavut uses a seven-digit alphanumeric code for senior secondary school courses. The first three digits are letters that indicate the title of the course; for example, ELA is used to designate English Language Arts courses. The subsequent four numerical digits indicate grade level and level of difficulty.

Nunavut currently offers Alberta secondary school courses and courses inherited from the Northwest Territories. In most cases, a 1 after the letters in the code indicates a Grade 10 course, a 2 indicates a Grade 11 course, and a 3 indicates a Grade 12 course. Courses listed as 10-20-30 (or 10-1, 20-1, 30-1) provide the greatest academic challenge and are designed primarily for students planning to attend university or certain programs in colleges or technical schools. The 13-23-33 and 15-25-35 courses are less academically rigorous and are intended primarily for students planning to enter into some programs in colleges or technical schools, into the trades, or into the workplace. The courses numbered 16-26-36 provide students with entry-level workplace skills.

Courses being developed in Nunavut are numbered 10 - 11 - 12. The two developed to date (Inuktitut 10 - 11 - 12 and Aulajaaqtut 10 - 11 - 12) meet university entrance requirements in the Humanities/Social Sciences.

5. Time Allotments and Course Load

Junior Secondary

Time allotments are noted in the following table, but it is recognized that due to the nature of L2 (second language) learning, students may take more than three years to accomplish full competency at the junior secondary level.

Junior Secondary School	Subject/Course	Time Required
(Grades 7 to 9)		(approximate hours per year)
	English	210 hours
	Inuktitut	90 hours
	Mathematics	180 hours
	Social Studies	90 hours
	Science	90 hours
	Physical Education	90 hours
	Health	60 hours
	Fine Arts	CO have
	(Art, Music, Drama)	60 hours
	Career and Technology	60 hours
	Studies	ou nours
	Total Hours Required	930 hours + 70 hours of
		contact time* per year

^{*}Note: Contact time refers to locally determined educational experiences under teacher supervision.

Senior Secondary

Senior secondary courses are organized on the basis of credits. One credit requires 25 hours of supervised learning. Key core courses (English, mathematics, science, social studies) have 5 credits and require 125 hours of study each. Other courses may be offered for 1, 2, 3, 4, or 5 credits. Due to the nature of L2 (second language) learning, students may take more than three years to accomplish full competency at the senior secondary level. Schools are required to provide a minimum of 1000 instructional hours per year.

Senior Secondary School	Subject/Course	Graduation Requirements
(Grades 10 to 12)		(1 credit = approximately
		25 hours of instructional time)
	English	15 credits
	Mathematics	10 credits
	Social Studies	10 credits
	Science	10 credits
	Physical Education	3 credits

Aulajaaqtut 11	3 credits
Aulajaaqtut Community	
Practicum	1 credit
Fine Arts	
(Art, Music, Drama)	3 credits
Northern Studies	3 credits
Career and Technology	
Studies	5 credits
Elective Grade 12 Courses	10 credits
Elective Courses	
(Unspecified Credits)	27 credits
Total Credits	100 credits

Note: The Inuit Language Protection Act (section 8) states that every child has the right to instruction in the Inuit Language and the commencement of this right comes into force for K to Grade 3 on July 1, 2009 and for all other primary and secondary grades on July 1, 2019. The new Nunavut Education Act (2008) states that every student shall be given a bilingual education and the languages of instruction shall be the Inuit Language and either English or French as determined by a district education authority with respect to the schools under its jurisdiction. The amount of instruction provided in any of these languages is determined at the community level in conformance with the Education Act. The Department of Education promotes holistic, thematic teaching that integrates a variety of subject areas.

6. Curriculum Organization

The curriculum for Nunavut schools is described in terms of competencies. The approach to learning helps students to understand the connections between various concepts and the strategies that lead to successful application of learning in new contexts.

As outlined in the *Inuit Qaujimajatuqangit Curriculum Framework*, there are four main curriculum strands running across the grade levels from kindergarten up to and including Grade 12. At the secondary levels, these four main curriculum areas may appear as discrete courses, while at the elementary levels they are integrated in a holistic way around a theme. These curriculum strands are identified in their content areas as follows:

Aulajaaqtut

This curriculum strand deals with wellness, making wise decisions, managing relationships, learning about traditional values, setting goals, making career plans, demonstrating leadership, and preparing for active community service, both at home and abroad. The program is based on traditional Inuit values and incorporates the knowledge of Elders. It provides an overview of social history over the past decades and celebrates the resiliency and persistence of the Inuit.

Iqqaqqaukkaringniq

This curriculum strand has a focus on math, science, innovation, and technology: ways of describing and improving the world, conceptual fields and contexts for development, ethical issues, using processes and procedures, and seeking solutions and proposing explanations.

Nunavusiutit

This strand explores Nunavut and its place in Canada and the world. It does this through an Inuit perspective of history, geography, environmental science, understanding the relationship to the land, survival, political history, economics, circumpolar issues, different world views, and global perspectives.

Uqausiliriniq

This strand has a focus on communication, language, and relationships with others: literacy, speaking, listening, presenting, reading, creating, viewing/observing, valuing, and bilingualism. Creativity and artistry are also viewed as ways of communicating and expressing oneself to others.

7. Testing and Grading Practices

The document *Ilitaunnikuliriniq: Assessment in Nunavut Schools* outlines the philosophy and principles of assessment in Nunavut classrooms. Achievement in every course is measured against a set of specific learning competencies and tracked within a student's competency profile. The process of self-assessment is critical to ensure that students participate actively in their learning and connect the learning outcomes identified in their curriculum with personal realities. Learning expectations are clearly communicated to students throughout each course. In order to succeed and progress to the next level, students must achieve an evaluation minimum of 50%. Some courses award a letter mark. The following table provides generalized indicators for corresponding letter to percentage marks.

Indicator	Per cent
Α	80%-100%
В	70%–79%
С	60%–69%
D	50%-59%
F	0%–49%

Students taking the following courses are required to write Alberta Education diploma examinations. Their final mark is an average of their final school mark and the diploma exam mark.

- Biology 30
- Chemistry 30
- Physics 30
- Science 30
- English Language Arts 30-1
- English Language Arts 30-2
- Pure Mathematics 30
- Applied Mathematics 30
- Social Studies 30
- Social Studies 33

Jurisdictions requiring documentation regarding a Grade 9 student from Nunavut should consult the student's sending school for the most recent report card of student progress and achievement. For senior secondary students from Nunavut, receiving schools should request a transcript from the Registrar, Student Records, Department of Education, P.O. Box 204, Pangnirtung, NU, XOA 0R0

8. Requirements for Graduation

Current (2008) Nunavut Senior Secondary School Graduation – Diploma Requirements		
Aulajaaqtut (Wellness/Social History) Strand:	7	
Aulajaaqtut (includes community practicum)	(4)	
Physical Education	(3)	
Iqqaqqaukkaringniq (Innovation and Technology) Strand:	25	
Mathematics	(10)	
Science	(10)	
Career and Technology Studies or Nunavut Early Apprenticeship Training	(5)	
Nunavusiutit (History, Heritage,		
Environment, Global and National Role)	13	
Strand:		
Social Studies	(10)	
Northern Studies	(3)	
Uqausiliriniq (Communication) Strand:	18	

English	(15)
Fine Arts	(3)
Additional Credits at the Grade 12 Level	10
Total Specified Credits	73
Additional Unspecified Course Credits	27
Total Minimum Credit Requirements	100

9. Prerequisites and/or Co-requisites

Students are usually expected to complete the lower-level course in a sequence before enrolling in the next course in the sequence. However, with permission from the principal, a student may challenge a course at a higher level and, upon successful completion, receive credit for the course at the lower level(s).

10. Other Types of Programs

Nunavut Early Apprenticeship Training (NEAT)

The Nunavut Early Apprenticeship Training (NEAT) program may begin in Grade 10. Students must be at least 16 years old and have a journeyperson or skilled tradesperson to work with. They are registered with the Nunavut Apprenticeship Registrar as a NEAT apprentice. Once they have completed Grade 12, they are registered as a regular apprentice.

Special Projects

Special projects are designed to recognize work undertaken by students on an individual or small-group basis. They allow students to pursue activities in which they have considerate interest or ability but which are not within the scope of the regular curriculum or the programs being offered in the school. Students may enroll in Special Projects 10, 20, or 30 for 3, 4, or 5 credits.

11. Assessment of Out-of-Territory and Foreign Studies

Students entering a Nunavut senior secondary school from outside the territory should submit transcripts, or other official statements of previous standing, to the school they plan to attend. The principal evaluates these documents in relation to approved secondary school courses or designates unassigned credits.

A secondary school principal may appeal to the Special Cases Committee for special consideration on behalf of a student entering the Nunavut school system in his or her graduating year.

Part 2 – Summary of Course Content

12. English Language Arts (First Language)

Grade 9

The English Language Arts program, as described in the *EL2 Junior Secondary Teacher's Handbook*, is an L2 (second language) program. It is organized around a continuum of learning competencies for communication. It supports Language of Instruction models and enables students to build on L1 language competency in the process of L2 language acquisition. These developmental processes build knowledge and understanding through communication and production as students develop a conceptual and social depth of language; discover the form and structure of language; explore new ideas, concepts, and experiences; and become personally engaged in effective communication. Students respond personally, critically, and creatively, and they negotiate and manage information, demonstrate an understanding of text, and comprehend and respond to texts. General production competencies interrelate and are interdependent; a variety of listening, speaking, reading, writing, viewing, and representing experiences achieve each competency. The Grade 9 course currently consists of two recently developed modules (*Say Yes to Children: A Module on Human Rights and Responsibilities* and *Turning 16*, plus a novel study). Two more modules are under development.

Grades 10–12

English 10-1 – 20-1 – 30-1 (ELA1105 – 2105 – 3105)

This Alberta Education course sequence addresses listening, speaking, viewing, reading, writing, and representing. It provides an in-depth study of text in terms of textual analysis and is intended for students interested in the study, creation, and analysis of literary texts. Emphasis is placed on personal response to text. Students interested in post-secondary education may register in this course sequence.

English 10-2 - 20-2 - 30-2 (ELA1104 - 2104 - 3104)

This sequence of Alberta Education courses addresses listening, speaking, viewing, reading, writing, and representing. It is designed for students interested in the study of popular culture and real-world contexts. It places a greater emphasis on personal response to context and the study of popular non-fiction and feature films.

English 16 – 26 – 36 (IOP1120 – 2120 – 3120)

This sequence of Alberta Education courses is intended to meet the literacy needs of students in the home, school, workplace, and community through a wide variety of learning experiences. Content is based on the abilities and needs of students; the philosophy and goals are consistent with the previous language arts courses. Alberta Education has replaced these courses.

Education Nunavut will also retire these courses when new courses related to Multiple Options are phased in over the next five years.

13. Français (First Language)

Français 9

The program of studies is developed for students enrolled in francophone schools and emphasizes the use of language as an instrument for communication, thinking, and personal development. Organized into the strands of listening, reading, speaking, and writing, the program provides students with strategies and skills for planning, monitoring, and evaluating their work. In addition to providing opportunities for students to function as effective communicators in everyday situations, it exposes them systematically to various forms of literature such as adventure stories, novel excerpts, fictional narratives, and poetry. Vocabulary and conventions of language such as spelling, basic sentence structure, and agreement of common verbs are explored to enhance the quality of communication.

Grades 10–12

Français 10-1, 20-1, 30-1

The program of studies is developed for students enrolled in francophone schools and emphasizes the use of language as an instrument for communication, thinking, and personal development. Organized into the strands of listening, reading, speaking, and writing, the program provides students with strategies and skills for planning, monitoring, and evaluating their work. In addition to providing opportunities for students to function as effective communicators in everyday situations, it exposes them systematically to various forms of literature such as adventure stories, novel excerpts, fictional narratives, and poetry. Vocabulary and conventions of language such as spelling, basic sentence structure, and agreement of common verbs are explored to enhance the quality of communication.

Français 10-2, 20-2, 30-2 (formerly called Français 13–23–33)

This series of courses is developed for students enrolled in francophone schools. The program, organized into the strands of listening, reading, speaking, and writing, helps students to

- acquire knowledge and basic strategies in oral communication, reading, and writing, and become effective and efficient listeners, readers, speakers, and writers through planning, monitoring, and evaluating their work
- attain a threshold of success and the necessary autonomy to carry out different tasks in everyday life
- be prepared for post-secondary studies and the workplace
- build cultural identity and develop a sense of belonging to the francophone community

14. English (Second/Additional Language)

Grade 9

See Section 12 English Language Arts (First Language).

Grades 10–12

English Second Language Levels 1 – 5 (ESL1120 – 1121 – 1122 – 1123 – 1124)

The goal of this program is to provide L2 students with the support they require to enable them to access the level of English required for success in secondary school. The outcomes are taken from the Alberta Education ESL program of studies. Teachers may also use any part of this program to adapt or complement their teaching of English as a first language or for teaching in English across the curriculum. Credits are not awarded for the first and fifth levels.

Reading 10 (ELA1145 – 1146 – 1147)

This Alberta Education course provides students with opportunities to explore the relevance of reading in daily life contexts and the various purposes and genres of reading and communication. Alberta Education no longer offers this course. Education Nunavut will also retire this course when new courses related to Multiple Options are phased in over the next five years.

Communications 21A – 21B (ELA2141 – 2142)

This sequence of Alberta Education courses provides students with opportunities to explore the elements of communication and how to use each effectively in various contexts and for various purposes. Alberta Education no longer offers these courses. Education Nunavut will also retire these courses when new courses related to Multiple Options are phased in over the next five years.

15. French (Second Language)

Grades 10–12

Students with no previous experience in French

In Grades 10 to 12, students who are studying French for the first time can take French 10-3Y, followed by French 20-3Y, and complete the course sequence with French 30-3Y. In this course sequence, students demonstrate the following abilities by the end of the three-year course sequence:

- Communication: Learners are able to understand and communicate simple oral and written messages (consisting of at least two or three statements) in contexts and situations that are familiar to them.
- Culture: Learners identify the presence of francophone people and groups in their community, their province, their country, and internationally and learn concrete facts about these cultures.
- Language: Learners understand and are able to use the sound-symbol system, common grammatical structures, and vocabulary that is limited to what they have been taught and word order in order to comprehend and produce simple oral and written communications.

Students continuing their studies from Junior High

In Grades 10 to 12, students who have acquired the knowledge, skills, and attitudes from their studies in elementary and junior high (nine-year program of studies) continue in the following course sequence: French 10-9Y, French 20-9Y, and French 30-9Y.

French 10-9Y

Students completing French 10-9Y demonstrate the following abilities:

- They can understand the main idea(s) and some related details in oral and written texts
 dealing with familiar, concrete topics, while being able to communicate, with some detail, a
 series of ideas, orally or in writing, based on familiar content and language structures
 known to them. These messages are usually prepared in advance, but are occasionally
 spontaneous.
- They can identify aspects of francophone history, literature, or arts that are of personal interest, using authentic sources.

- They can compare and contrast aspects of their own way of life with aspects of the way of life of individuals or groups from various francophone cultures.
- They can understand and use a variety of grammatical structures in the present and sometimes in the past, accessing a rich vocabulary as they communicate orally and in writing using simple and complex sentences.

French 20-9Y

Students completing French 20-9Y demonstrate the following abilities:

- They can understand the main idea(s) and most related details in oral and written texts dealing with mostly familiar, concrete topics and some abstract texts with guidance.
- They can communicate, with some detail, a series of ideas, orally or in writing, based on familiar content and language structures that are known to them. These messages are usually prepared in advance, but are demonstrating more spontaneity.
- They can access authentic sources using a variety of information and communication technologies so as to compare and contrast aspects of their own way of life with aspects of the way of life of individuals or groups from various francophone cultures.
- They can understand and use a variety of grammatical structures in the past, present, and immediate future, accessing a rich vocabulary as they communicate orally and in writing using simple and complex sentences.

French 30-9Y

Students completing French 30-9Y demonstrate the following abilities:

- They can understand the main idea(s) and most related details in oral and written texts dealing with concrete topics and abstract texts.
- They can communicate, in detail, a series of ideas, orally or in writing, based on familiar content and language structures that are known to them. These messages can be either spontaneous or prepared in advance.
- They can access authentic sources using a variety of information and communication technologies so as to compare and contrast aspects of their own way of life with aspects of the way of life of individuals or groups from various francophone cultures.
- They can understand and use a variety of grammatical structures in the past, present, and future, accessing a rich vocabulary as they communicate orally and in writing using a variety of simple and complex sentences.

16. French (Immersion)

Grades 10–12

French Language Arts 10-1, 20-1, 30-1

The program is developed for French immersion students and emphasizes the use of language as an instrument for communication, thinking, and personal development. Organized into the strands of listening, reading, speaking, and writing, the program provides students with strategies and skills for planning, monitoring, and evaluating their work. In addition to providing opportunities for students to function as effective communicators in everyday situations, it exposes them systematically to various forms of literature such as adventure stories, novel excerpts, fictional narratives, and poetry. Vocabulary and conventions of language such as spelling, basic sentence structure, and agreement of common verbs are explored to enhance the quality of communication.

French Language Arts 10-2, 20-2, 30-2

This series of courses is developed for French immersion students. The program, organized into the strands of listening, reading, speaking, and writing, helps students to do the following:

- acquire knowledge and basic strategies in oral communication, reading, and writing, and become effective and efficient listeners, readers, speakers, and writers through planning, monitoring, and evaluating their work
- attain a threshold of success and the necessary autonomy to carry out different tasks in everyday life
- be prepared for post-secondary studies and the workplace
- develop an appreciation for the French language and culture

17. Mathematics

Grade 9

Mathematics at the junior secondary level follows the WNCP Common Curriculum Framework. The general and specific outcomes are broken down by strands, and the following topics are covered: number, patterns, and relations; shape and space; and statistics and probability. Students engage in a variety of experiences and activities that allow them to explore these concepts and their application in the real world. Courses emphasize the development of reasoning and communication skills, solution seeking, and analytical thinking in order to help students develop personal strategies and become mathematically literate.

Grades 10–12

Pure Mathematics 10 – 20 – 30 (MAT1037 – 2037 – 3037)

This Alberta Education course sequence is an academic program designed for students intending to pursue further studies in mathematical, scientific, or business-related fields in post-secondary institutions. Its primary focus is on algebra and functions; the course sequence is designed to prepare students for studies in calculus.

Applied Mathematics 10 – 20 – 30 (MAT1038 – 2038 – 3038)

This Alberta Education course sequence is designed for students not requiring calculus and advanced mathematics as part of a post-secondary program. Its primary focus is on numerical and geometrical methods; the course sequence provides a broader approach to problem solving than algebra-based courses.

Math (31) Introduction to Calculus (MAT3213 – 3214 – 3215)

This Alberta Education course introduces students to mathematical methods of calculus. Required components include pre-calculus and limits; derivatives and derivative theorems; applications of derivatives; and integrals, integral theorems, and integral applications. There are eight possible units available in the elective component: calculus of exponential and logarithmic functions; numerical methods; volumes of revolution; applications of calculus to physical sciences and engineering; applications of calculus to biological sciences; applications of calculus to business and economics; calculus theorems; and further methods of integration.

Essentials of Mathematics 10 – 11 – 12 (MAT1042 – 2042 – 3042)

This WNCP sequence of courses assists students in developing skills to become fully numerate and to participate effectively in an increasingly technological society. This involves students in learning based on mathematical foundations and requires applying skills and concepts in their personal context. The ability to recognize mathematical demands and possibilities in daily encounters and activities is an important focus.

18. Science

Grade 9

Junior secondary science follows the *NWT Junior High Science Curriculum Document (1991)* and CMEC's Pan-Canadian *Common Framework of Science Learning Outcomes (1997)*. At this level, students study the nature, relationships, and social and environmental contexts of science and technology. In particular, there is an emphasis on the relationships between sciences and technology and culture. The strand topics include life and the environment; matter and energy;

and earth, space, and time. An Inuit perspective is applied as much as possible, with an emphasis on helping students realize that traditional knowledge is as much a science as the contemporary view and explanations of phenomena.

Grades 10–12

Science 10 – 20 – 30 (SCN1270 – 2270 – 3270)

This Alberta Education course sequence provides a well-rounded science education for students who want a strong foundation in science and aspire to career goals that involve study in post-secondary institutions. Science 10 is the foundation course for all academic science programs, including biology, chemistry, physics, and Science 20 - 30. Biology 20 - 30, Chemistry 20 - 30, and Physics 20 - 30 programs are for students who have clearly defined post-secondary career goals that require scientific disciplines.

The Science 10 - 20 - 30 program emphasizes major concepts, science process skills, and scientific attitudes as common threads that run through all units of study. Themes of science (for example, matter, energy, systems) are the conceptual foundations that link the theoretical structures of various scientific disciplines.

Science 10 has four units: energy from the sun; matter and energy in living systems; matter and energy in chemical change; and energy and change. Change is the common theme in Science 20—analysis of change and control of change. Science 20 has four units: the changing earth; changes in living systems; chemical changes; and changes in motion. Themes of systems and energy link all Science 30 units. Thinking of any collection of objects, cells, or processes as a system draws attention to how the parts of the system interact with one another. Science 30 has four units: living systems respond to their environment; chemistry in the environment; electromagnetic energy; and energy and the environment.

Biology 20 – 30 (SCN2230 – 3230)

Major science concepts developed in Biology 20 are systems, equilibrium, energy, and matter. Diversity and change are other themes addressed. The course has four units: the biosphere; cellular matter and energy flows; matter and energy exchange in ecosystems; and matter and energy exchange by the human organism. Major science concepts developed in Biology 30 include change, diversity, equilibrium, and systems. Matter and energy are subordinate themes. Biology 30 has four units: systems regulating change in human organisms; reproduction and development; cells, chromosomes, and DNA; and change in populations and communities.

Chemistry 20 – 30 (SCN2240 – 3240)

Matter and chemical change are common themes in all Chemistry 20 units. An understanding of the nature of matter and analysis of its changes are essential for understanding what is happening and for predicting what will happen; control of change is essential for the design of

technological systems. Chemistry 20 consists of four units: matter as solutions, acids, bases, and gases; quantitative relationships in chemical changes; chemical bonding in matter; and the diversity of matter as an introduction to organic chemistry. Chemistry 30 includes the themes of systems, energy, and change. Equilibrium and matter are also highlighted to a lesser extent. Chemistry 30 has three units: thermo-chemical changes; electrochemical changes and equilibrium; and acids and bases in chemical changes.

Physics 20 – 30 (SCN2260 – 3260)

Energy is the science theme common to all units in Physics 20, with change and matter playing a subordinate role. Energy in its many forms causes change and determines kinematics and dynamics, circular motion and gravitation, mechanical waves, and light. In Physics 30, diversity of matter and energy are the predominant themes. Physics 30 has four units: conservation laws; electric forces and fields; magnetic forces and fields; and nature of matter.

Science 15 – 25 – 35 (LDC1290 – 2290 – 3293)

This program is based on the 1988/1994 NWT high school science program. The focus is on preparing students with a solid foundation of concepts and skills common to biology, chemistry, physics, and environmental science. It tends to be student-oriented and activity-oriented, with students learning in the context most relevant to them. The key concepts of change, energy, and matter are emphasized, with a lesser focus on equilibrium, diversity, and systems. Through experimentation, problem solving, and independent studies, students gain an understanding and awareness of how important a role science plays in their daily lives.

Science 35 (Environmental Studies) is a locally developed Nunavut course that focuses on the topics of northern ecosystems, climate, physical geology, and technologies. Teachers are able to concentrate on the specific topics that are most relevant for their community and local situation.

Note: Nunavut Education will gradually replace this sequence of courses with Environmental Systems 10 - 11 - 12. At the 10 level, the focus will be on Nuna/Land Science, at the 11 level on Tariuq/Ocean Science, and at the 12 level, on Sila/Atmospheric Science. New modules are scheduled to be developed, piloted, and implemented in the coming years.

Science 16 – 26 (SCN1290 – 2290)

This Alberta Education sequence of courses is intended to provide students with sufficient scientific knowledge, attitudes, and skills that will be useful to them in their daily lives. This program is activity-based and is intended to have students draw connections between science and their own personal situations.

19. Social Studies

Nunavut Education is developing its own program for the Nunavusiutit curriculum strand. New modules are scheduled to be developed, piloted, and implemented in the coming years.

Grade 9

The current Grade 9 course follows the NWT (1993) Social Studies and Civics curriculum. It focuses on Canada and Canadians and takes an inquiry approach to topics of northern/cultural knowledge, governance, human rights and freedoms, current events, social change and development, and globalization. The content is organized into three themes: the geography of Canada; Canadian history to the 20th century; and international connections. In addition, the *WNCP Common Curriculum Framework for Social Studies* is a resource document.

Grades 10-12

As noted, Nunavut Education is developing its own program for the Nunavusiutit curriculum strand. Schools will continue to offer the former Alberta Social Studies 10 - 20 - 30, 13 - 23 - 33, and 16 - 26 as the program is developed. The Nunavusiutit program will be implemented in Grade 10 as of 2011.

Social Studies 10 - 20 - 30 (SST1150 - 2150 - 3150)

This Alberta Education course sequence prepares students academically for entry into post-secondary level humanities programs. At the 10 level, this course has two topics: Challenges for Canada: the 20th Century and Today; and Citizenship in Canada. Social Studies 20 has two themes: the development and interaction of nations: 19th century Europe; and interdependence in the global environment. Social Studies 30 has two themes: political and economic systems; and global interaction.

Social Studies 13 – 23 – 33 (SST1151 – 2151 – 3151)

This Alberta Education course sequence prepares students for post-secondary college-level programs. At the 13 level, there are two topics: Challenges for Canada: the 20th Century and Today; and Citizenship in Canada. Social Studies 23 focuses on the development of the modern world; and challenges in the global environment. Social Studies 33 themes are political and economic systems; and global interaction.

Social Studies 16 – 26 (IOP1160 – 2160)

This Alberta Education course sequence provides the skills and attitudes needed for students to become responsible citizens and contributing members of society. The themes in Social Studies 16 are Being a Citizen; You and the Law; and Careers: Your Employability. The themes in Social

Studies 26 are You and the Canadian Identity; Canada and You in the World; and Career Trends and You.

Northern Studies 15 (LDC1193)

This Nunavut Education course has three units of study. One is a study of Inuit language, the second is the Nunavut Land Claim Agreement, and the third is a study of a topic in Inuit culture.

20. Other Courses

A. Inuit Language

Grade 9

This is currently being revised.

Grades 10–12

Inuktitut 10 – 11 – 12 (ILA1000 – 2000 – 3000)

This Nunavut Education course sequence is an intensive program that teaches fundamental principles of Inuit language and culture. Students respond personally, critically, and creatively, negotiate and manage information, demonstrate an understanding of text, and comprehend and respond to texts. General production competencies interrelate and are interdependent; each is achieved through a variety of listening, speaking, reading, writing, viewing, and representing experiences. This program meets university entrance requirements at 25 universities across Canada.

B. Aulajaaqtut

Grade 9

This is currently being revised.

Grades 10–12

Aulajaaqtut 10 – 11 – 12 (NRC1000 – 2000 – 3000)

Aulajaaqtut at the senior secondary level involves the completion of four modules of study plus a practicum project in each year. Topics covered include: personal and community wellness, service and volunteerism, goal setting and leadership, career investigation, and social history. Currently three modules (NRC2403) plus a practicum (NRC2400) at the Grade 11 level are a graduation requirement. This program meets university entrance requirements at 25

universities across Canada. All Nunavut students entering grade 10 in 2010 will be required to successfully complete all three Aulajaaqtut courses in order to graduate. In 2012-2013, Aulajaaqtut 10-11-12 will become a graduation requirement.

C. Career and Technology Studies

Grades 9–12

This Alberta Education (1998) course sequence provides students with options to build on competencies and interests they already have in areas outside of core courses. These courses are grounded in real contexts and enable students to explore potential career options and develop job-related skills. Courses may be delivered inside or outside the school facility and encourage students to use course work to develop connections that will enable them to transfer their learning effectively to career and job options. Each course is worth 1 credit. Students must have 5 CTS credits for graduation; the course code prefix is CTS. Many CTS course options available in Nunavut schools are locally developed courses that include cultural knowledge and skills; their code prefix is NCS.

D. Fine Arts

Grades 10–12

Schools may choose from a range of Alberta fine arts courses. The Grade 12 courses must be offered for 5 credits, but others may be offered for 3, 4, or 5 credits.

E. Cadet Courses

A maximum of 15 credits may be applied to the unspecified credits for graduation. The course code is prefaced by CDT.

F. Physical Education

Grade 9

Nunavut schools follow the 1990 Northwest Territories physical education program.

Grades 10-12

Nunavut schools follow the Alberta program of studies for physical education. Courses may be offered for 3, 4, or 5 credits.

Physical Education 10 – 20 – 30 (PED1445 – 1446 – 1447 – 2445 – 2446 – 2447 – 3445 – 3446 – 3447)

The four general outcomes concentrate on activity, health benefits, cooperation, and developing habits for an active life. The general outcomes are interrelated and interdependent. Each is to be achieved through a variety of physical activities such as dance, games, types of gymnastics, individual activities, and activities in an alternative environment.

21. Contact Information

Brad Chambers

Director, Policy and Planning Division Department of Education Government of Nunavut P.O. Box 1000, Station 900 Iqaluit, Nunavut XOA 0H0 Telephone: (867) 975-5606

Eav. (967) 075 5605

Fax: (867) 975-5605

Cathy McGregor

Director
Curriculum and School Services Division
Department of Education
Government of Nunavut
P.O. Box 1000, Station 900
Iqaluit, Nunavut XOA 0H0
Telephone: (867) 975-5641

Fax: (867) 975-5605

Manager

Curriculum and School Services Division
Department of Education
Government of Nunavut
P.O. Box 390
Arviat, Nunavut XOC OEO

Telephone: (867) 857-3054

Fax: (867) 857-3090