

Issues in Canadian Geography, Grade 9

Applied

CGC1P

This course focuses on current geographic issues that affect Canadians. Students will draw on their personal and everyday experiences as they explore issues relating to food and water supplies, competing land uses, interactions with the natural environment, and other topics relevant to sustainable living in Canada. They will also develop an awareness that issues that affect their lives in Canada are interconnected with issues in other parts of the world. Throughout the course, students will use the concepts of geographic thinking, the geographic inquiry process, and spatial technologies to guide and support their investigations.

Prerequisite: None

OVERVIEW

The course has five strands. Instruction and learning related to the expectations in strand A are to be interwoven with instruction and learning related to expectations from the other four strands. Strand A must not be seen as independent of the other strands. Student achievement of the expectations in strand A is to be assessed and evaluated *throughout* the course.

Strand A

A: Geographic Inquiry and Skill Development
Overall Expectations
A1. Geographic Inquiry: use the geographic inquiry process and the concepts of geographic thinking when investigating issues relating to Canadian geography
A2. Developing Transferable Skills: apply in everyday contexts skills, including spatial technology skills, developed through the investigation of Canadian geography, and identify some careers in which a background in geography might be an asset

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Overview *(continued)*

Throughout this course, when planning instruction, teachers should weave the expectations from strand A in with the other expectations from strands B–E.

Strands B–E

Overall Expectations and Related Concepts of Geographic Thinking	Big Ideas*	Framing Questions*
B: Interactions in the Physical Environment		
B1. Natural Processes and Human Activity: analyse some interactions between physical processes, events, and phenomena and human activities in Canada (FOCUS ON: <i>Interrelationships; Geographic Perspective</i>)	Natural phenomena and events have an impact on people. Likewise, people's actions can also influence natural processes and phenomena.	What are the most significant effects of natural processes and events, including natural disasters, on Canadian communities?
B2. Influence of the Natural Environment on Human Activity: explain how physical processes and the natural environment influence human activity in Canada (FOCUS ON: <i>Spatial Significance; Interrelationships</i>)	Natural processes and the surrounding natural environment can influence where people live and what they do.	How does human activity affect the natural environment in your local community? In what ways does the natural environment influence the way you live and what people do in your community?
B3. Characteristics of Canada's Natural Environment: describe some natural processes and key characteristics of the natural environment in Canada (FOCUS ON: <i>Spatial Significance; Patterns and Trends</i>)	Physical regions are areas with similar natural characteristics. Canada has diverse physical regions.	How do you think the natural environment would influence the way you live if you moved to another part of Canada? What are the significant characteristics of Canada's natural identity?
C: Managing Canada's Resources and Industries		
C1. Managing Resources: assess the influence of personal choices and community actions on the use of natural resources in Canada (FOCUS ON: <i>Interrelationships; Geographic Perspective</i>)	Individuals can influence how natural resources are used.	How can you change your way of living to reduce your consumption of resources? What roles do various industries play in your community?
C2. Canadian Industries: describe the economic, environmental, social, and political significance of selected aspects of Canada's resources and industries (FOCUS ON: <i>Patterns and Trends; Geographic Perspective</i>)	People have different points of view about the value of different industries and their use of resources.	Which of Canada's natural resources do you think has the most important uses?
C3. The Use of Natural Resources: describe the distribution and use of selected natural resources in Canada (FOCUS ON: <i>Spatial Significance; Interrelationships</i>)	Canada has a wide variety of natural resources, and they are used in many different ways.	

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Overall Expectations and Related Concepts of Geographic Thinking	Big Ideas*	Framing Questions*
D. Changing Populations		
D1. Population Trends and Their Impacts: assess the impact on Canadian communities of changes in the characteristics of Canada's population, and describe ways of responding to these changes (FOCUS ON: <i>Pattern and Trends; Geographic Perspective</i>)	Canadian communities respond to the aging and diversity of their populations in a variety of ways.	How can communities meet the needs of the people who live there? Why is immigration important to Canada?
D2. Immigration Trends: analyse recent immigration trends in Canada (FOCUS ON: <i>Interrelationships; Patterns and Trends</i>)	Canada's population is becoming more culturally diverse in response to both national and global needs.	In what ways are the patterns and trends in Canada's population reflected in your community?
D3. Population Characteristics: describe key characteristics of population settlements in Canada and the major demographic characteristics of the Canadian population (FOCUS ON: <i>Spatial Significance; Patterns and Trends</i>)	Communities in Canada vary in terms of characteristics such as population size, age breakdown, and cultural diversity.	
E. Liveable Communities		
E1. Sustainable Communities: identify factors that affect the sustainability of communities, and describe strategies for improving their sustainability (FOCUS ON: <i>Interrelationships; Geographic Perspective</i>)	Individual actions can make a community more sustainable.	What can you do to make your community more sustainable? What factors should be considered in order to determine the impacts that a development project or a change in land use would have on your community?
E2. Impacts of Land Use: analyse impacts of land use in Canada on communities and the natural environment (FOCUS ON: <i>Spatial Significance; Interrelationships</i>)	A community's built environment can have an impact on both the natural environment and the people who live in the community.	
E3. Patterns of Land Use: describe patterns of land use in their local community (FOCUS ON: <i>Spatial Significance; Patterns and Trends</i>)	Land is used in various ways within their community, and many land uses are connected to broader, external networks.	What are the characteristics of land use within your community, and how do land uses in the community connect with provincial, national, and global networks?

* See page 14 for a discussion of the purpose of big ideas and framing questions.

A. GEOGRAPHIC INQUIRY AND SKILL DEVELOPMENT

OVERALL EXPECTATIONS

Throughout this course, students will:

- A1. Geographic Inquiry:** use the geographic inquiry process and the concepts of geographic thinking when investigating issues relating to Canadian geography;
- A2. Developing Transferable Skills:** apply in everyday contexts skills, including spatial technology skills, developed through the investigation of Canadian geography, and identify some careers in which a background in geography might be an asset.

SPECIFIC EXPECTATIONS

A1. Geographic Inquiry

Throughout this course, students will:

- A1.1** formulate different types of questions to guide investigations into issues in Canadian geography (e.g., factual questions: *What are the cultural backgrounds of people living in your community?*; comparative questions: *Which uses of energy have the highest consumption?*; causal questions: *How can increasing the use of public transit contribute to better air quality in your community?*)
- A1.2** select and organize relevant data and information on geographic issues from a variety of primary and secondary sources (e.g., primary: *raw data from field work, both quantitative and qualitative; statistics; photographs; satellite images*; secondary: *newspaper columns, books, atlases, geographic magazines, websites, graphs, charts, published maps*), ensuring that their sources represent a diverse range of views
Sample questions: “How might you use statistics relating to temperature and precipitation for a specific location? Where might you find these data?”
- A1.3** assess the credibility of sources and information relevant to their investigations (e.g., *by considering how the data are constructed to support the author’s point of view, the possible bias of the author, the expertise of the author, the accuracy of the text and supporting data, the intended audience, the purpose of the messaging, the context in which the information was presented*)
Sample questions: “Whose point of view does this source represent? Why would it be important to determine whether there are other points of view? How will you decide which points of view to include in your investigation?”
- A1.4** interpret and analyse data and information relevant to their investigations, using various tools, strategies, and approaches appropriate for geographic inquiry (e.g., *use data about their way of living and use of resources to calculate their ecological footprint and compare it to the ecological footprints of people in Canada and other parts of the world; use graphic organizers, such as cross-classification tables or ranking ladders, to interpret the potential economic, political, social, and/or environmental impacts of an industry that wants to establish itself in their community*)
Sample questions: “What kinds of tools, including organizers, can you use to analyse data and information? How are they helpful?” “What graphic organizer could you use to compare data and information on different communities in order to make a decision on where to live?”
- A1.5** use the concepts of geographic thinking (i.e., *spatial significance, patterns and trends, interrelationships, geographic perspective*) when analysing and evaluating data and information, formulating conclusions, and making judgements about geographic issues relating to Canada (e.g., *use the concept of spatial significance to assess the characteristics of locations for different types of land use when planning city spaces; use the concept of patterns and trends to analyse the impact of earthquakes on urban structures; use the concept of interrelationships to guide personal behaviours that may affect the natural environment; use the concept of geographic perspective to analyse the*

environmental, social, political, and/or economic impacts of building a highway or energy pipeline through the lands of a First Nation, Métis, and/or Inuit community)

Sample questions: “What would be the advantages and disadvantages of building high-rise apartments in a particular place?” “What trends do you see in the use of alternative energy in Ontario?” “How might consumer choices relate to social justice and environmental sustainability?” “What is the relationship between a particular resource and the economy?” “How will warmer winter temperatures affect businesses that rely on cooler temperatures (e.g., skiing resorts, wineries that make ice wine)?” “When considering an issue, how does using geographic perspective enable you to analyse its complexity?”

- A1.6** evaluate and synthesize their findings to formulate conclusions and/or make judgements or predictions about the issues they are investigating

Sample questions: “What criteria could be used to choose the best place to live in Canada?” “Given your community’s current population trends, what will its land-use needs will be in the near future?”

- A1.7** communicate their ideas, arguments, and conclusions using various formats and styles, as appropriate for the audience and purpose (e.g., a debate for classmates on the ideal population size for their local community; a video for a Grade 7 geography class showing the impact of a severe thunderstorm or tornado near their local community; a webcast or podcast for parents and other community members, using an analysis based on geographic perspective to recommend guidelines for the use of water on hot summer days; a blog for the school on proper disposal and recycling of electronic waste)

Sample questions: “Who is your intended audience? How much do they know about your topic? Do they need information presented to them in a way that is easy to understand? Do they need more detailed information and arguments? What format and level of difficulty will meet your audience’s needs and present your ideas most effectively?” “How can symbols, shading, and colour be used on a map to convey your intended message more clearly?”

- A1.8** use accepted forms of documentation (e.g., footnotes, author/date citations, reference lists, bibliographies, credits) to acknowledge different types of sources (e.g., websites, blogs, books, articles, films, data)

- A1.9** use appropriate terminology when communicating the results of their investigations (e.g., vocabulary specific to their inquiry, terminology related to geography and to the concepts of geographic thinking)

A2. Developing Transferable Skills

Throughout this course, students will:

- A2.1** describe ways in which geographic investigation can help them develop skills, including spatial technology skills and the essential skills in the Ontario Skills Passport (e.g., reading text, including graphic text; writing; oral communication; using graphs, charts, and tables; computer use; use of a geographic information system [GIS], satellite imagery; measurement and calculation; data analysis; decision making; planning; organizing; finding information; problem solving), that can be transferred to the world of work and to everyday life

Sample questions: “How useful is GIS in helping you determine where you would like to live within a community?” “Why is it important to plan ahead and understand the route you are following when you are relying on a global positioning system (GPS) for directions?”

- A2.2** apply in everyday contexts skills and work habits developed through geographic investigation (e.g., asking questions to deepen their understanding of an issue; listening to and considering other people’s points of view when discussing an issue; collaborating with a team to determine the criteria that need to be considered when making a decision; using spatial skills to determine best routes of travel)

- A2.3** apply the concepts of geographic thinking when analysing current events involving geographic issues (e.g., to identify locational factors that affect the importance of an issue; to identify patterns and trends that provide context for an issue; to identify interrelationships that clarify factors involved in an issue; to understand the implications of different aspects of an issue and/or different points of view about the issue) in order to enhance their understanding of these issues and their role as informed citizens

Sample questions: “Why would understanding the spatial significance of the global distribution of fresh water help you analyse a controversy over foreign access to Canada’s fresh water?” “What kinds of patterns and trends might you want to consider if you were discussing a news story about climate change?” “What

is the interrelationship between resource use, the environment, and current debates about expanding public transit? How does this issue affect you or your personal choices?”
“How will an analysis based on geographic perspective help you achieve a more balanced understanding of a controversial issue, such as a proposal to build a large industrial facility near a residential area?”

A2.4 identify careers in which a geography background might be an asset (*e.g., GIS technician, park ranger, municipal parks or recreation worker, forester, land surveyor*)

B. INTERACTIONS IN THE PHYSICAL ENVIRONMENT

OVERALL EXPECTATIONS

By the end of this course, students will:

- B1. Natural Processes and Human Activity:** analyse some interactions between physical processes, events, and phenomena and human activities in Canada (**FOCUS ON:** *Interrelationships; Geographic Perspective*)
- B2. Influence of the Natural Environment on Human Activity:** explain how physical processes and the natural environment influence human activity in Canada (**FOCUS ON:** *Spatial Significance; Interrelationships*)
- B3. Characteristics of Canada’s Natural Environment:** describe some natural processes and key characteristics of the natural environment in Canada (**FOCUS ON:** *Spatial Significance; Patterns and Trends*)

SPECIFIC EXPECTATIONS

B1. Natural Processes and Human Activity

FOCUS ON: *Interrelationships; Geographic Perspective*

By the end of this course, students will:

- B1.1** describe the types of natural disasters that can occur in Canada, and analyse the impacts of selected events

Sample questions: “What were some of the social, political, environmental, and economic impacts of the tornado that hit Goderich in 2011?” “What are some typical impacts of ice storms on communities in southern Ontario and Quebec?” “How does heavy flooding, like that along the Red River in 2011, affect communities?” “How does the risk of an earthquake in southern Ontario compare with that in British Columbia?” “Can a natural disaster have positive impacts? Can you give examples?”
- B1.2** assess ways of minimizing the impacts of different kinds of natural disasters, events, and phenomena

Sample questions: “What can the owners of houses on a river bank do to protect their homes from flooding?” “What can individuals and public officials in tornado-prone areas do to reduce the risk of injury and damage from tornadoes?” “What is the role of the media in

warning people of natural disasters?” “How can spatial technologies (e.g., cartography, GIS, GPS, remote sensing) help monitor or predict violent weather, floods, avalanches, earthquakes, or coastal erosion?”

Using spatial skills: Examples of GIS maps can be used to illustrate the types of information about disasters, events, and phenomena that can be captured and monitored through mapping.

- B1.3** analyse some environmental, economic, and social impacts of changes in Canada’s climate (*e.g., effects of drought on crop production in the Prairies; effects of less sea ice on Inuit communities, Arctic shipping routes, and wildlife habitat; effects of more extreme weather on public safety, personal comfort, and the economy*)

Sample questions: “How might more snow in winter be related to a warming climate?” “Why would coastlines be more prone to flooding as temperatures rise?” “What effects might milder winters have on insect pests, and how, in turn, would people be affected by changes in insect populations?”
- B1.4** explain how human activities in their local region can have an impact on natural processes (*e.g., vehicle use, chimney emissions, and barbecue and lawn mower usage contribute to smog and*

can change the acidity of lake water; blasting and drilling may trigger land instability; removing trees and paving over land change the amount of water going into the soil and back into the air; expansion of highways can lead to more animals being struck by vehicles and can also disrupt animal migration patterns and separate animals from their food supplies, thus endangering their populations)

Sample questions: “How do human activities contribute to changes in Canada’s climate?” “What are some of the environmental costs that may occur when humans adapt the natural landscape to their needs (e.g., by building irrigation systems, clearing land, draining marshes)?” “Consider a proposal for adapting a natural feature in your area for human use (e.g., filling in a swamp and building a shopping mall on it). What are the environmental, economic, social, and political implications of the proposal? How would the costs and benefits of this proposal compare with those of leaving the natural feature untouched or modifying it in a way that preserved most of its natural characteristics but allowed some human use?”

B2. Influence of the Natural Environment on Human Activity

FOCUS ON: *Spatial Significance; Interrelationships*

By the end of this course, students will:

B2.1 explain how the natural characteristics of an area in Canada influence human activities

Sample questions: “What natural criteria would you use to identify the best place in Canada for downhill skiing? For cross-country skiing?” “What are the possibilities for growing food in the Arctic?” “How does the maple syrup industry or the peach-growing industry depend on the natural environment?”

B2.2 explain the influence of Canada’s natural characteristics (e.g., climate, soils, topography, proximity to water, natural resources) on the spatial distribution of its population

Sample questions: “What does a population settlement map tell us about the preferred range of latitude for settlement in Canada?” “Where will people resettle if coastal areas are flooded?” “How have people adapted to areas where natural characteristics are not conducive to settlement?”

B3. Characteristics of Canada’s Natural Environment

FOCUS ON: *Spatial Significance; Patterns and Trends*

By the end of this course, students will:

B3.1 describe the natural characteristics (e.g., landscape, weather, drainage, vegetation, wildlife) of their local area or region, and explain their significance for the region

Sample questions: “What would you consider to be the three most important natural features in your community? What makes them important to the community? Should the community ensure that they are preserved?”

Using spatial skills: This expectation provides an excellent opportunity to develop skills in using topographic maps. Students will be able to relate mapping conventions, such as the use of symbols, colour, and lines, to physical features in their area.

B3.2 compare the natural characteristics of their local community with the natural characteristics of other communities across Canada

Sample questions: “Which community would be the hardest to adjust to if you were to move to it? Why?” “Which communities are in the best food-growing areas?” “Which of the communities you have looked at has the landscape and climate conditions best suited to your favourite outdoor activities?”

Using spatial skills: Climate graphs are a useful tool for visualizing and comparing temperature and precipitation patterns. Students can use them to compare the climate characteristics of different cities across Canada. Understanding contour lines on topographic maps can help students compare differences in landscape relief.

B3.3 describe the spatial distribution of different types of natural regions in Canada (e.g., landform regions, vegetation regions, climate regions)

Sample questions: “Which would be more representative of Canada’s natural landscape, a picture of the Western Cordillera or one of the Canadian Shield?” “Which landform regions attract the most tourists to Canada?” “What are the ten natural features in Canada that you would most like to see?” “Which communities

would you include in a tour for people who want to experience the variety of natural regions found in Canada?"

Using spatial skills: Students can consolidate their knowledge of natural regions by annotating a thematic map of Canadian landforms with photographs and descriptions of a tour they designed to highlight the diversity of Canadian natural regions.

B3.4 describe how natural processes relating to hydrology, geology, and climate continue to shape Canada's landscape (*e.g., precipitation, waves, and shoreline currents continue to erode the land in some places and build up silt elsewhere; earthquakes caused by faulting continue to occur and move the land*)

Sample questions: "In your region, what evidence can you find that shows natural processes at work?" "What natural processes formed the Great Lakes–St. Lawrence Lowlands? What impact have these same processes had on most of northern Ontario and the Canadian Shield?"

B3.5 identify ways in which natural events in Canada and other parts of the world are linked by Earth's physical processes (*e.g., a large volcano can put sunlight-reflecting particles into the air and cause a general cooling of the global climate for a year or more; a large earthquake under the Pacific Ocean near Japan can cause a tsunami in British Columbia; hot humid air masses from the Gulf of Mexico can cause high humidity and severe thunderstorms in southern Ontario in the summer*)

Sample question: "What are some of Earth's natural processes that can result in different types of natural disasters in Canada?"

C. MANAGING CANADA'S RESOURCES AND INDUSTRIES

OVERALL EXPECTATIONS

By the end of this course, students will:

- C1. Managing Resources:** assess the influence of personal choices and community actions on the use of natural resources in Canada (**FOCUS ON:** *Interrelationships; Geographic Perspective*)
- C2. Canadian Industries:** describe the economic, environmental, social, and political significance of selected aspects of Canada's resources and industries (**FOCUS ON:** *Patterns and Trends; Geographic Perspective*)
- C3. The Use of Natural Resources:** describe the distribution and use of selected natural resources in Canada (**FOCUS ON:** *Spatial Significance; Interrelationships*)

SPECIFIC EXPECTATIONS

C1. Managing Resources

FOCUS ON: *Interrelationships; Geographic Perspective*

By the end of this course, students will:

- C1.1** identify major sources of energy used in Canada (*e.g., fossil fuels, nuclear, hydro*), and assess the viability of alternative energy options for various communities across Canada

Sample questions: "Where in Canada would wind energy be a good option for a community?" "How are individuals, businesses, and communities in Canada using solar energy?" "Which alternative energy option(s) would be best for your community or local area?"

- C1.2** assess the impact of different types of food production on resource use and the environment in Canada

Sample questions: "Are there certain food products that consume fewer or smaller amounts of natural resources than others or whose production has less of an impact on the environment?" "Are there actions you could take or choices you could make that would reduce the resources needed to produce the food you eat?"

- C1.3** analyse their personal use of natural resources

Using spatial skills: Calculating their ecological footprint, using one of many available online

tools, gives students an opportunity to recognize the nature and extent of their personal impact on resource use and the environment. Students can also measure their personal consumption of various resources directly, recording such variables as the length of time they run water or the type of vehicle they use and the distance they travel in it.

- C1.4** develop a personal plan of action that supports the idea of stewardship of resources

Sample questions: "How might one's personal beliefs influence one's use of resources?" "What can you as an individual do to make better use of our natural resources? How can calculating your ecological footprint help you do this?"

C2. Canadian Industries

FOCUS ON: *Patterns and Trends; Geographic Perspective*

By the end of this course, students will:

- C2.1** assess the value (*e.g., in terms of gross national product and other measures, such as numbers employed, contribution to culture and national identity*) of various industrial sectors in Canada (*e.g., energy, aerospace, automotive, food, agricultural, medical, software, financial*)

Sample questions: "What is the value of tourism to Canada?" "Which industrial sector employs the most people?" "How would you decide the value of an industry, such as Alberta's oil sands

industry, that has large economic benefits but also high environmental and social costs?" "Why would people hold different points of view about the value of an industry?" "In which service and knowledge-based industries is Canada known as a global leader? Why might this be important?" "What other industries does the forestry industry supply or support?"

C2.2 describe Canada's major exports and imports, and assess some of the environmental, economic, social, and political implications of Canada's current export and import patterns

Sample questions: "Is there a pattern in the types of resources and products that Canada exports and imports?" "Are most of our exports natural resources, items that have been manufactured, or goods and services?" "Would people living in Canada be able to produce the commodities that Canada imports?" "How do your choices as a consumer affect Canadian imports?"

Using spatial skills: Having students read different types of graphs can help them visualize statistical data. Bar or pie graphs, for example, can be used to show the value of exports by different economic sectors. Line graphs can be used to show changes over time in our trade balance.

C2.3 assess the economic, environmental, social, and political significance of a specific industry for their local area or another area of their choice

Sample questions: "What are the social, economic, and environmental costs and benefits of having this industry in the area?" "How would other businesses in our area be affected if this industry were to collapse? How might this affect you?" "How would a new sports attraction (e.g., a hockey team, a major sporting event) affect a community? What other businesses might it attract?" "How might the development of the rich mineral resources of northern Ontario's ring of fire region affect First Nations communities in the area?"

C3. The Use of Natural Resources

FOCUS ON: *Spatial Significance; Interrelationships*

By the end of this course, students will:

C3.1 identify the natural resources needed to produce and distribute a product that is used

in the everyday lives of people living in Canada (e.g., raw materials, resources used in production and transportation)

Sample questions: "What are some of the natural resources that are used in making bread, a car, a cellphone, or other product, and where do they come from?" "Why might you want to know what natural resources a product contains and where they come from before purchasing it?"

Using spatial skills: Students can create a flow map showing where the resources, including parts, come from for a local industry. This will help them visualize the economic relationships the local area has with other parts of the country and/or world.

C3.2 describe the location, use, and importance of selected natural resources, including water resources, that are found in Canada, and compare the availability of these resources with their availability in the rest of the world

Sample questions: "How does the availability of fresh water in Canada compare with the availability of fresh water elsewhere in the world?" "What are some of the more valuable resources found in Canada, and why are they valuable?" "How does the accessibility of a resource influence its use?"

C3.3 describe the characteristics (e.g., distribution, accessibility, abundance, sustainability, cost of developing) of various renewable, non-renewable, and flow resources that are found in Canada

Sample question: "How might understanding the renewability of different types of resources make a difference in how people use the resources?"

C3.4 describe how energy is used in Canada (e.g., transportation, residential use, industrial use)

Sample questions: "How do different types of transportation vary in their usage of energy?" "What types of energy do you use in your day-to-day living, and for what purposes?"

Using spatial skills: Students can use statistics and graphs to compare the amount of fuel different vehicles use per 100 kilometres or the amount of electricity needed to operate various appliances.

D. CHANGING POPULATIONS

OVERALL EXPECTATIONS

By the end of this course, students will:

- D1. Population Trends and Their Impacts:** assess the impact on Canadian communities of changes in the characteristics of Canada’s population, and describe ways of responding to these changes (**FOCUS ON:** *Patterns and Trends; Geographic Perspective*)
- D2. Immigration Trends:** analyse recent immigration trends in Canada (**FOCUS ON:** *Interrelationships; Patterns and Trends*)
- D3. Population Characteristics:** describe key characteristics of population settlements in Canada and the major demographic characteristics of the Canadian population (**FOCUS ON:** *Spatial Significance; Patterns and Trends*)

SPECIFIC EXPECTATIONS

D1. Population Trends and Their Impacts

FOCUS ON: *Patterns and Trends; Geographic Perspective*

By the end of this course, students will:

- D1.1** assess economic, social, and environmental impacts of major population trends in Canada today (*e.g., aging of the population; increasing cultural, linguistic, and social diversity; changes in family structure*)

Sample questions: “How will people’s needs change as they get older?” “How will an aging population affect the types of goods and services available in their community?” “What do immigrants need to establish themselves in a new country?” “How are Canadian families changing?”

Using spatial skills: Students can read population pyramids, graphs, and thematic maps to help them identify patterns and trends related to the aging of the population and assess their consequences. They can also use statistical data to analyse changes in family structures and thematic maps to highlight aspects of cultural diversity in various communities.

- D1.2** describe some opportunities (*e.g., cultural enrichment, new economic opportunities*) and challenges (*e.g., communication barriers,*

ghettoization) that may arise for communities whose populations come from a diversity of cultural backgrounds

Sample questions: “In what ways can cultural diversity enrich the life of a community?” “Why might tensions develop between people from different ethnic backgrounds? What strategies might prevent or reduce these tensions?”

- D1.3** describe ways in which Canadian society can respond to the needs of a changing population

Sample questions: “Is it better to invest in more nursing homes for the elderly or more home-care support?” “What kinds of support services are available for immigrants? Who provides them?” “How can schools help newcomers?” “What can employers do to help single parents balance work and childcare responsibilities?”

- D1.4** analyse population trends in their local community or area, assess related needs, and recommend appropriate responses to those needs

Sample questions: “Are the population trends in your community similar to the trends in Canada as a whole?” “What do you anticipate will be the biggest area of concern in your community as a result of these trends?” “What kinds of business opportunities do you see emerging as a result of the changes taking place in the population of your community?”

D2. Immigration Trends

FOCUS ON: *Interrelationships; Patterns and Trends*

By the end of this course, students will:

D2.1 analyse current immigration trends in Canada (*e.g., trends in overall numbers, numbers in different immigrant categories, countries of origin*)

Sample questions: “What are the different categories in which immigrants can apply for entry into Canada? What factors affect the number of people applying in each category? Which category do you think most future immigrants will apply for and why?”

Using spatial skills: Students can read flow maps or country-of-origin statistics to help them analyse trends in immigrant origins.

D2.2 explain the role of push factors (*e.g., unemployment, political unrest, war, high crime rate*) and pull factors (*e.g., job opportunities, political stability, democratic society, low crime rate*) in shaping current Canadian immigration patterns

Sample questions: “What issues or circumstances might make people want to leave their home countries? Why might they choose Canada instead of some other country as their preferred destination?”

Using spatial skills: Comparing quality-of-life statistical indicators for Canada and other countries (*e.g., infant mortality rate, literacy rate, gross domestic product per capita, percentage of population with access to potable water, number of doctors per 1000 people*) can help students understand why people might want to come to Canada.

D3. Population Characteristics

FOCUS ON: *Spatial Significance; Patterns and Trends*

By the end of this course, students will:

D3.1 describe key characteristics of different types of population settlements in Canada (*e.g., towns, cities, census metropolitan areas, megalopolises,*

First Nations reserves), and explain their distribution (*e.g., near rivers, highways, natural resources*)

Sample questions: “What are the advantages and disadvantages of living in a suburb of a large city? Which would you prefer to live in, the suburb or the city?” “Why might a First Nation student prefer to live on a reserve rather than in a nearby city?” “Is there a pattern to where people live in Canada?” “What role does the Trans-Canada Highway play in the distribution of population settlement in Canada?”

Using spatial skills: Students can use GIS to identify correlations between population settlements and characteristics such as transportation routes, physical features, industries, and resources. A different size of symbol, based on various statistical intervals, can be used to illustrate the relative size of different populations. Students can also create an annotated thematic map to highlight characteristics associated with different sizes of settlements across Canada.

D3.2 describe the major demographic characteristics of present-day Canada (*e.g., population density, growth rate, age-sex distribution, cultural diversity*), and compare them to those of your community or local area

Sample questions: “What three languages are most commonly spoken in Canada?” “How does the number of people under 25 compare to the number of people over 65? Why is this important to know?” “How do the population density and other population characteristics of your community or local area compare with those of other Canadian communities?”

Using spatial skills: Students can use different types of graphs to compare demographic statistics. Students may also create graphs to compare demographic statistics for their own community with national statistics. Reading population pyramids for different communities or areas can help them recognize differences in their age structures.

E. LIVEABLE COMMUNITIES

OVERALL EXPECTATIONS

By the end of this course, students will:

- E1. Sustainable Communities:** identify factors that affect the sustainability of communities, and describe strategies for improving their sustainability (**FOCUS ON:** *Interrelationships; Geographic Perspective*)
- E2. Impacts of Land Use:** analyse impacts of land use in Canada on communities and the natural environment (**FOCUS ON:** *Spatial Significance; Interrelationships*)
- E3. Patterns of Land Use:** describe patterns of land use in their local community (**FOCUS ON:** *Spatial Significance; Patterns and Trends*)

SPECIFIC EXPECTATIONS

E1. Sustainable Communities

FOCUS ON: *Interrelationships; Geographic Perspective*

By the end of this course, students will:

- E1.1** use a variety of measurements (*e.g., ecological footprint, carbon footprint, water footprint*) to compare the impact on the natural environment of people in Canada and people in other countries

Sample question: “How does your ecological footprint compare to that of the average Canadian and those of people in other countries?”

- E1.2** identify various ways in which communities in Canada dispose of their waste material (*e.g., landfilling, composting, incineration, primary and secondary sewage treatment*), and describe potential environmental impacts of these methods

Sample questions: “Can all waste materials be disposed of in the same manner? Why or why not?” “How does your community dispose of unwanted electronics?” “What happens to your garbage if your community does not have a landfill site?” “What could communities and individuals do to minimize the amount of material that has to be landfilled or incinerated?”

Using spatial skills: Students can create an annotated thematic map to highlight where waste materials (hazardous, solid, and liquid) end up. Field trips to local sewage treatment plants and landfill sites can help students better understand the challenges involved in waste management.

- E1.3** describe ways in which communities can improve their environmental sustainability (*e.g., expansion of recycling programs, promotion of infill development, expansion of mass transit systems, addition of bike lanes to major roadways, support of local market gardens, preservation or addition of green space, promotion of programs to make houses and industries more energy efficient*)

Sample questions: “What actions could businesses such as grocery and clothing stores take to be more environmentally sustainable?” “What kind of programs are available in your area that support energy conservation? Is your school part of an energy monitoring program?” “Does your community have water usage guidelines for particular situations, such as dry spells or extremely cold weather?”

Using spatial skills: Students may create maps and diagrams to illustrate the changes they would make to a community in order to make it more environmentally sustainable (*e.g., changes in transportation, land use, buildings*).

- E1.4** identify actions that individuals can take to live more sustainably, and explain the benefits for their local community

Sample questions: “What can you do to make a difference in your community?” “How does the community benefit if you take your own bag when you shop for groceries?” “How does eating local foods, cleaning up a local river, installing a green roof on the school, or using alternative energy support sustainability?” “How might the community benefit economically, socially, and environmentally from the preservation or restoration of a heritage

building?" "What changes can you make to your home that would help make the community more environmentally sustainable?"

E2. Impacts of Land Use

FOCUS ON: *Spatial Significance; Interrelationships*

By the end of this course, students will:

E2.1 analyse interrelationships between the built and natural environments

Sample questions: "Why are many communities built on the shoreline of a body of water? What are the benefits for these communities? What are the risks?" "How does surrounding farmland support a community, and what stresses might the community place on the farmland? How might the loss of nearby farmland affect a community?" "What are some of the ways in which activities within communities affect air and water quality locally and further afield?" "Which type of environment best suits the way you would like to live: urban, suburban, or rural?" "Which natural and built characteristics (e.g., climate, resources, landscape, water bodies; transportation networks, industries, social and cultural amenities, architecture, recreational areas) would you include in a list of criteria for selecting an ideal place to live?"

Using spatial skills: Students can compare maps of urban areas from different time periods to assess the direction and scope of urban growth. The class could create a shared annotated map illustrating their preferred places to live in Canada.

E2.2 assess the compatibility of different types of land uses with each other within their local community (e.g., *land uses that conflict with each other, land uses that make other land uses more efficient or less efficient*)

Sample questions: "Are recreational areas close to the residential areas?" "Do public transportation routes provide easy access to commercial areas?" "Is residential land located near industrial spaces?" "Are sewage treatment plants next to recreational land?" "If you were to redesign your community, would you change the patterns of land use in any way?"

E2.3 explain how changes in land use can affect the growth or decline of different parts of a community (e.g., *new suburban malls can drain business from downtown stores and lead to the decline of a community's central core; replacing an old industrial district with retail or recreational development, adding additional transportation*

capacity, new cultural institutions, amenities, industrial parks can stimulate growth)

Sample questions: "How might the closure of a pulp and paper mill lead to the decline of a community?" "Why would people choose to move to the suburbs? Why is the resulting urban sprawl a problem?" "Why is it beneficial to have housing near a downtown commercial area?" "What types of social issues may arise from changes in land use in an urban community?"

E2.4 analyse the impact of a selected project on a community (e.g., *residential or resort development, urban renewal, installation of water and waste management systems, creation of a park or recreational site, addition of bike lanes on major streets, opening of a mine near a reserve community*)

Sample questions: "If you were planning on moving to a new community, why would it be important for you to check on future plans for the community?" "Why might it be worthwhile to attend a planning meeting about a proposed project in your community? What could you do to voice your ideas?"

E3. Patterns of Land Use

FOCUS ON: *Spatial Significance; Patterns and Trends*

By the end of this course, students will:

E3.1 describe different types of land use within their community (e.g., *commercial, transportation, industrial, residential, institutional, recreational, agricultural, open space*), and explain reasons for their location

Sample questions: "How can aerial photographs of the community help us identify different land uses? How could you use the photographs to see changes in land use and plan for future land-use needs?"

Using spatial skills: Students can deepen their understanding of land use by carrying out a land-use field study in a selected area of their community. They can then compare their land-use descriptions with those in the municipality's official plan and propose ways of modifying the official plan.

E3.2 describe spatial distribution patterns for human systems and services in their community (e.g., *infrastructure components, such as transportation and energy networks, communication towers, water and waste facilities*)

Using spatial skills: Official plans are useful for identifying how transportation routes,

hydro lines, and other infrastructure corridors are distributed and relating their location to other land uses.

E3.3 identify spatial connections between human systems and services in their community and the broader regional, national, and/or global networks to which they belong (*e.g., food distribution, communications, transportation, and energy networks*)

Using spatial skills: Students can create maps to illustrate connections between various communities and other regions and networks, such as farming regions and transportation and energy networks.