

*Catholic District School Board Writing Partnership*

Canadian and World Studies

# Course Profile

## **World Geography: Human Patterns and Interactions**

Grade 12

University Preparation

CGU4U

• *for teachers by teachers*

This sample course of study was prepared for teachers to use in meeting local classroom needs, as appropriate. This is not a mandated approach to the teaching of the course. It may be used in its entirety, in part, or adapted.

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### **Acknowledgments**

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## Course Overview

### **World Geography: Human Patterns and Interactions, CGU4U, Grade 12, University Preparation**

**Policy Document:** *The Ontario Curriculum, Grades 11 and 12, Canadian and World Studies, 2000.*

**Prerequisite:** Any University or University/College Preparation course in Canadian and World Studies, English, or Social Sciences and Humanities

## Course Description

This course examines how cultures in different parts of the world interact with their environments and with each other. Students will use geographic concepts, methods, and tools to explore settlement patterns, human migration, cultural change, globalization, environmental issues, and other topics relevant to an understanding of how spatial, political, economic, and social factors affect settled environments and human activities.

## How This Course Supports the Ontario Catholic School Graduate Expectations

This course provides an excellent environment for students to demonstrate their commitment to, and, apply the teachings of, the Catholic Church. Using geographic skills as a vehicle for studying people and culture, students identify the factors that contribute to the development of the world's communities. Students are required to be both educated supporters and educated critics of past and present decisions that have created both boundaries and barricades between regions of the world. This course provides an opportunity for students to understand the history, cultural heritage, and pluralism of today's global society as well as the role they play in shaping its future. Students employ values forged in the Catholic tradition to analyse the impact of mass movements of people, the role globalization plays in promoting both economic equity and disparity, and the results of cultural diffusion. Upon completion of this course, students are asked to demonstrate their commitment to the faith through their actions towards people of different cultures, their initiative in promoting global equality, and their desire to share their good fortune with others.

## Course Notes

In all units of this Course Profile students:

- identify physical factors and human decisions that formed both past and present settlement patterns;
- demonstrate an understanding of the causes and effects of human migration;
- analyse the economic, social, and political actions that contribute to cultural convergence and divergence;
- evaluate the role of globalization in promoting both equity and disparity;
- apply geographic techniques, quantitative methodologies, and geotechnologies to complete an inquiry.

## Profile Design

This course can be approached in two ways. The approach taken in this Course Profile isolates vital components of Human Geography, such as settlement, migration, and globalization, and draws from the various regions of the world for examples of human and physical interactions. Depending on available resources, teachers may instead choose to divide the world into regions first, isolate the settlements within the region, and proceed to apply the components of human geography to that area. In both approaches, it is vital that all areas of the world are included in this study. Students must be able to identify major settlements and recognize both the physical and human regions to which these settlements belong.

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This Course Profile reflects the overall and specific expectations outlined in the five strands of *The Ontario Curriculum, Grades 11 and 12, Canadian and World Studies, 2000*. The first four units have been scoped around four broad topics reflected in the course description – Settlement, Migration, Culture, and Globalization. The impact of human interactions on the environment has been integrated into each unit. Focus questions have been used to assist both teachers and students in this global study of human ecology and cultural interaction.

The activities are designed to reflect both the knowledge and skills expected of geography students at this level. Keeping in mind the destination of the course, effort has been made to emphasize the importance of independent learning, being familiar with quantitative methodologies, and using geotechnologies for both inquiry and presentation. Opportunities for assessment and evaluation have been suggested; the use of culminating unit activities is recommended. Lab activities, which focus on skills and the application of geotechnologies, should be an integral part of each unit of study.

### **The Independent Study – Course Culminating Activity**

Unit 5: A Study in Human Geography provides time for students to further their inquiry and develop their quantitative and geotechnical skills. The independent study should be introduced in Unit 1 and revisited several times during the course. Two hours in each of the first four units are designated for conferencing and inquiry development. Students are expected to select a topic, complete their research, and conduct any necessary field studies prior to the beginning of Unit 5. A suggested approach to the inquiry is provided in the Unit 5 Overview.

### **World Geography in the Curriculum**

Regardless of their postsecondary plans, the skills and knowledge acquired in this course are transferable and enhance all academic disciplines. A student who leaves secondary school with knowledge of global religions, political and physical systems, as well as cultural and ethnic development, is a student well prepared for postsecondary studies and, more importantly, well prepared for life.

Opportunities for students to learn the history, customs, and beliefs of today's societies, as well as the successes and struggles, should permeate the school community and be available to all students. Cultural activities, news broadcasts, educational displays, guest speakers, trips to community centres, and trips to a variety of places of worship are necessary to promote the importance of this global study.

### **Development of Unit 3 – Cultural Sensitivity**

This course provides an opportunity to study the dynamics of culture. Activities dealing with cultural divergences, unless treated with considerable knowledge and sensitivity, may produce difficult situations.

Teachers should:

- balance discussions on cultural differences with cultural similarities;
- be aware that multicultural events in the school should go beyond costume, food, and dance as indicators of cultural traits and interactions;
- be sensitive to the multicultural nature of students in the classroom and the experiences of their immediate families;
- be aware that specific expectations deal with cultural conflict, disharmony, and confrontations;
- use examples from a variety of regions in the world, particularly when discussing religions, customs, values, ethnicity, race, and the interactions of these human variables.

### **Destination – University**

World Geography: Human Interactions is a University Preparation course. The content and expected skills are designed to meet the entrance requirements for university programs. The delivery of this course must emphasize theoretical aspects of the content and include concrete applications. Emphasis should be placed on independent research skills and independent learning skills. Teachers should liaise with universities to ensure necessary skills in quantitative methodologies and geotechnologies are being addressed.

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## Assessment & Evaluation of Student Achievement

Both the assessment and evaluation of student work should be conducted for the purpose of improving student performance. As stated in *Program Planning and Assessment*, “Seventy per cent of the grade will be based on assessments and evaluations conducted throughout the course. Thirty per cent of the grade will be based on a final evaluation in the form of an examination, performance, essay, and/or other methods of evaluation.”

Teachers measure student performance often and in conjunction with the four Achievement Chart categories. Student tasks should be clearly stated and based on the expectations of the course. Rubrics should be used when appropriate and should be constructed in a way that clearly identifies for the student the expectations that are being measured, the level the student is achieving, and a place for personalized comment. Rating scales and checklists are also good tools for tracking student progress and achievement of learning expectations.

### Term Work – 70%

Seventy per cent of a student’s grade is based on evaluations conducted throughout the course. Lab reports and culminating activities that require students to use geographic information systems, research skills, case studies, quantitative methods, correlation techniques, graphs, maps, and electronic print resources are highly recommended. Tests, demonstrations, presentations, oral reports, portfolios, inventories, organizers, debates, quizzes, and conferencing are suggested strategies for students to demonstrate their achievement of the expectations.

### Final Evaluation – 30%

It is recommended that the final evaluation consist of a formal examination on the year’s work and a course culminating activity that requires students to demonstrate their technical skills and knowledge in the form of an inquiry. Students can, therefore, demonstrate their level of achievement within the framework of two evaluation techniques that are consistent with postsecondary practices.

In Unit 5, an example of a culminating task has been provided. To enrich the learning experience, the teacher may provide a list of parameters within which students can design their own inquiry - one which piques their interest and requires them to make use of a number of overall and specific expectations from the five strands.

In the inquiry, students must include a range of specific and overall expectations and demonstrate their ability to use research, analysis, and presentation skills effectively.

### Using Geographic Information Systems (GIS)

The use of geotechnologies not only enhances students’ abilities to develop their inquiry skills, it is a provincial expectation in all Geography courses offered in Ontario Secondary Schools. Software, such as *ArcView 3.2*, *ArcCanada 2.0*, and *MFTeach*, are Ministry-licensed resources that can be used effectively throughout this course. Support services for teachers and students, GIS lessons, and links to additional databases can be found on their respective websites.

Having been introduced to GIS in Grade 9, students should be encouraged to view the software as more than a tool to execute prescribed exercises. A review of general skills, such as creating shape files, editing tables, creating definitions and queries, creating charts, importing data, using the calculator, hot linking information to maps, and creating original layouts, can assist students in their independent study. Students should also be made aware of the link between Global Positioning Systems and GIS. Hand-held devices could be used to collect local data. The data could then be imported into programs, e.g., *ArcView 3.2*, to conduct a spatial analysis.

If site licences have been purchased for the Esri extensions, students should be encouraged to make use of the extensions for their course culminating activity. Their use would also be appropriate for enrichment opportunity and for the modifications of activities in Unit 1.

## Units: Titles and Times

* Unit 1	Settlement Patterns and Interactions	23 hours + 2 hours CA
Unit 2	Human Migrations	23 hours + 2 hours CA
Unit 3	The Dynamics of Culture	23 hours + 2 hours CA
Unit 4	Globalization	23 hours + 2 hours CA
Unit 5	Human Geography Culminating Activity – Independent Inquiry (CA)	10 hours

\* This unit is fully developed in this Course Profile.

CA = Culminating Activity

## Unit Overviews

### Unit 1: Settlement Patterns and Interactions

**Time:** 23 hours + 2 hours (CA)

#### Unit Description

An *ecumene* can be defined as a settled environment. Although ecumenes consume a relatively small amount of the earth's surface, the impact they have on both humans and the surrounding environment is considerable. In this unit, students examine the physical, social, cultural, and political factors that contribute to the formation of various settlement patterns. Students assess the ability of selected settlements, both in the present and past, to meet human needs. Students evaluate the impact concentrations of people have on a physical site as well as the role physical phenomena play in the form and function of a community. To support their studies, students use examples drawn from North, Central, and South America; Eastern and Western Europe; Asia; and Africa. Students apply effective communication, decision-making, problem-solving, time, and resource-management skills to ensure their success. Students employ both spatial and quantitative skills to determine why some ecumenes have grown and flourished while others have succumbed to the pressures of population growth. Finally, students create a case study of a present-day settlement in which humans have altered the physical site to meet their needs. Students are reflective and creative thinkers who examine, evaluate, and apply their knowledge of interdependent systems for their development as just, compassionate individuals in our global society.

#### Unit Overview Chart

Cluster	Learning Expectations	Assessment Categories	Focus
1	SSV.01, SSV.03, GIV.01, SSV.02, HEV.01, HEV.03, SS1.01, SS3.03, SS3.01, UC2.01, SS1.03, SS2.02, GI2.03, GI3.03, GI2.01, GI2.02, SS1.02, GI1.01, HE2.05, GI2.04, HE2.01, GI2.07 CGE2b, 3c, 5g, 4b, 3b	Knowledge/ Understanding Thinking/ Inquiry Communication Application	What are ecumenes? How have they developed? <ul style="list-style-type: none"> <li>• Patterns – rural and urban</li> <li>• Patterns – global and regional</li> <li>• Density and distribution</li> <li>• Changing patterns</li> <li>• Meeting human needs</li> </ul>
2	HEV.04, HE1.03, UC1.06, GI2.01, GI2.03, SS1.03, SS2.02, GI2.05, GC3.05, GI2.07, HE2.05, HE2.01, HE1.01, HE1.04, HE3.04, GI1.06 CGE7i, 5e, 1e, 7d	Knowledge/ Understanding Thinking/ Inquiry Communication Application	How does the physical environment affect settlement patterns? <ul style="list-style-type: none"> <li>• Site and Situation</li> <li>• Defining regions</li> <li>• Natural resources</li> <li>• Natural phenomenon</li> </ul>

Cluster	Learning Expectations	Assessment Categories	Focus
3	SSV.01, GCV.01, GIV.02, SS2.01, SS1.04, GI3.01, GC3.01, GC2.04, HE1.01, GI2.01, GI2.05, GI2.07, GI3.02, HE1.02 CGE4c, 5e, 4e	Knowledge/ Understanding Thinking/ Inquiry Communication Application	In what ways do human activities influence settled environments? <ul style="list-style-type: none"> <li>• Human culture</li> <li>• Human function</li> <li>• Effects on settled patterns</li> </ul>

## Unit 2: Human Migration

**Time:** 23 hours + 2 hours (CA)

### Unit Description

Mass migration has profoundly affected previously settled regions or countries by changing the cultural and physical landscape. Historically, human beings have migrated as a result of social, political, cultural, and economic factors. In this unit, students demonstrate an understanding of these factors as they lead to cultural interdependence and the promotion of social equity. Students analyse the various reasons people leave a rural area to move to cities and the consequences of these movements for rural and urban landscapes. Students describe the influence of mass migrations on culture. By analysing regions of the world that have experienced large-scale immigration or emigration, students assess how push-and-pull factors contribute to the processes. Students assess the impact of migration on ecosystems and other natural or human-made environments. Students demonstrate their responsibility as both Canadian and global citizens who respect the diversity of the world's peoples and cultures. They are humble listeners, compassionate observers, and, most importantly, witnesses to the Catholic social teachings by promoting equality, democracy, and solidarity for a just, peaceful, and compassionate society.

### Unit Overview Chart

Activity	Learning Expectations	Assessment Categories	Focus
1	SSV.03, UCV.01, GIV.01, GIV.02, UC1.01, UC2.01, UC3.01, GI2.01, GI2.02, GI2.03, GI2.06, SS3.02, GI2.07 CGE4a, 7g	Knowledge/ Understanding Thinking/ Inquiry	Why do people migrate? <ul style="list-style-type: none"> <li>• Past and present reasons</li> <li>• Push-and-pull factors</li> </ul>
2	UC1.02, UC1.03, HEV.03, UC1.04, UC3.01, UC3.02, UC2.01, UC2.02, HEV.04, GIV.01, GIV.02, GC3.01, GI2.05, GI2.07, GI3.01, GI3.02, GI3.04	Knowledge/ Understanding Thinking/ Inquiry Communication	What factors lead to mass migration? <ul style="list-style-type: none"> <li>• Social</li> <li>• Economic</li> <li>• Religious</li> <li>• Cultural</li> <li>• Political</li> </ul>
3	HEV.03, HE2.04, HE2.02, GC2.04, GC3.04, GIV.01, GIV.03, GI2.05, GI2.07, GI3.01, GI3.02, GI3.04	Knowledge/ Understanding Communication	How does rural-to-urban migration impact on urban systems? <ul style="list-style-type: none"> <li>• Rural-to-urban shift</li> <li>• Urban stress</li> <li>• Urban sprawl</li> </ul>

Activity	Learning Expectations	Assessment Categories	Focus
4	HEV.02, HE2.03, HE3.03, UC2.03, UC2.05, UC2.08, GIV.01, GIV.02, GIV.03, GI1.01, GI2.05, GI2.06, GI2.07, GI3.01	Knowledge/ Understanding Thinking/ Inquiry Communication Application	What are the implications of migration for human and natural systems? <ul style="list-style-type: none"> <li>• Cooperation</li> <li>• Conflict</li> <li>• Development</li> <li>• Disparity</li> </ul>

### Unit 3: The Dynamics of Culture

**Time:** 23 hours + 2 hours (CA)

#### Unit Description

Canada, like other nations, has witnessed a whirlwind of changes, as our world becomes more and more multicultural on local, national, and global scales. In this unit, students explain how cultural characteristics act as linking factors within and between regions and examine the role the Catholic Church has played in the promotion of unity in diversity through cultural respect and equity. Students analyse economic, social, and cultural factors that create these links. In addition, students assess the impact of cultural convergence and divergence and explain the influence on human environments and activities. Students must be responsible citizens who have a “heart felt” respect for, and a deep understanding of, the history, cultural heritage, and pluralism of today’s contemporary society.

#### Unit Overview Chart

Activity	Learning Expectations	Assessment Categories	Focus
1	SS1.04, GC1.01 CGE7g	Knowledge/ Understanding	What is culture? <ul style="list-style-type: none"> <li>• Similarities</li> <li>• Differences</li> </ul>
2	GCV.02, GC1.03, GC1.04, GC2.02, GI2.06, GI2.06 CGE7f, 7g	Knowledge/ Understanding Thinking/ Inquiry	What do the terms <i>cultural divergence</i> and <i>cultural convergence</i> imply? What factors contribute to cultural convergence and divergence? <ul style="list-style-type: none"> <li>• Social</li> <li>• Economic</li> <li>• Religious</li> <li>• Cultural</li> <li>• Political</li> </ul>
3	SS3.03, GC1.04, GC2.02, GC2.04, UC2.06, GC3.02, UC2.03 CGE7f, 7e	Thinking/ Inquiry Application	How do cultures meet changing needs? <ul style="list-style-type: none"> <li>• Role of church and state</li> <li>• Traditions</li> <li>• Modernization</li> </ul>
4	SS3.04, SSV.03, GCV.01, GCV.02, GC1.03, GC2.01, GC3.04, GC3.01, UC2.03, HE2.02, GIV.01, GIV.02, GIV.03, GI2.04, GI2.07 CGE7i, 7f	Thinking/ Inquiry Communication Application	How does culture influence human environments and activities? <ul style="list-style-type: none"> <li>• Customs</li> <li>• Celebrations</li> <li>• Sacred places</li> </ul>

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## Unit 4: Globalization

**Time:** 23 hours + 2 hours (CA)

### Unit Description

Globalization is a process that implies prosperity to some and disparity to others. In this unit, students evaluate the positive and negative effects of the information revolution, technological progress, and global trade on world regions and the impact these factors have on cultural/economic convergence and divergence. By examining the role of international organizations, students assess the extent to which globalization fosters economic cooperation and promotes cultural understanding. Students conduct their analysis and draw their conclusions in light of gospel values with an informed moral conscience. They demonstrate, through their discussions, writings, and actions, a positive sense of self and respect for the dignity and welfare of others. Students evaluate the impact of economic globalization on faith, human dignity, empowerment, family, justice, and stewardship.

### Unit Overview Chart

Activity	Learning Expectations	Assessment Categories	Focus
1	SSV.03, GCV.02, GC1.04, GC1.03, GC2.04, GIV.02 CGE3f, 7e	Knowledge/ Understanding	What is globalization? <ul style="list-style-type: none"><li>• Information revolution</li><li>• Technological progress</li><li>• Multinational cooperation</li></ul>
2	SSV.03, GCV.02, GCV.03, GC2.02, GC2.04, UCV.03, UC3.02, GI2.01, GI2.06 CGE2e	Knowledge/ Understanding Thinking/ Inquiry	How does globalization facilitate economic development? <ul style="list-style-type: none"><li>• Global trade</li><li>• Access to markets/trade barriers</li><li>• Development of resources</li><li>• General Agreement on Tariffs and Trades (GATT), European Economic Community (EEC), and North American Free Trade Association (NAFTA)</li></ul>
3	SSV.03, GCV.02, GCV.03, GC1.03, GC1.04, UCV.02, UC1.05, UC2.04, UC2.05, UC3.03, GC2.04, GIV.03, GI2.07 CGE7e, 7g	Knowledge/ Understanding Thinking/ Inquiry Communication Application	How does globalization contribute to economic disparity? <ul style="list-style-type: none"><li>• Depletion of source resources</li><li>• Labour inequities</li><li>• Factory production vs. family production</li><li>• Supplying global needs vs. local needs</li></ul>
4	SSV.03, GCV.02, GC1.04, GC1.03, GC2.04, GI2.06, GI2.06, GI2.07 CGE1d, 2c, 7e	Knowledge/ Understanding Thinking/ Inquiry	How does globalization contribute to political and social conflict? <ul style="list-style-type: none"><li>• Spheres of influence</li><li>• World forums and protests to them</li></ul>
5	SSV.03, GCV.02, GC1.01, GC1.02, GC2.02, GC2.03, GC2.04, GC3.03, UC2.08, UC3.03, HE3.01, GI2.06, UC2.07, GI2.07 CGE2e	Knowledge/ Understanding Thinking/ Inquiry	How does globalization foster political and social cooperation? <ul style="list-style-type: none"><li>• Foreign aid</li></ul>

Activity	Learning Expectations	Assessment Categories	Focus
6	GIV.04, GI1.01, GI1.02, GI2.05, GI3.04, GI3.05, GI3.03, GI3.05	Knowledge/ Understanding Application	What employment opportunities and/or barriers might result from globalization? <ul style="list-style-type: none"> <li>• Technology exchange</li> <li>• Employment exchange</li> <li>• Inability to compete</li> </ul>

### Unit 5: Human Geography Course Culminating Activity – Independent Inquiry

**Time:** 10 hours

#### Unit Description

Students conduct independent inquiries that require a critical analysis of the impact the diffusion of popular customs has had on selected developing regions of the world. Students address:

- the host region’s susceptibility to the threat of domination and economic colonialism;
- the impact popular customs have on natural environments, particularly those vulnerable to human activities and change;
- the loss of folk customs;
- the positive and negative effects of *global assimilation* upon traditional culture;
- the impact of rapid development and the depletion of source resources;
- the effect on faith communities, family, and political structures;
- the effect of popular customs on a region’s carrying capacity, ecumene patterns, and urban development.

Students select from the regions of Eastern Asia, Eastern Europe, the Middle East, or Central Africa to conduct their inquiry. The selection process begins in Unit 1 and the development of the inquiry continues through Unit 5. Time has been allocated in each unit for student/teacher conferencing, goal setting, and assessment of progress.

Students are responsible for collecting print, visual, and empirical resources to support their inquiry. They organize their materials and manipulate data to support their study. Field studies, where appropriate, should be conducted. Students may present their findings in print; however, they should be encouraged to submit their report electronically. In both cases, students’ abilities to conduct an inquiry, manipulate data, think critically, use geotechnologies, and draw conclusions are evaluated.

Although the course culminating activity is introduced in Unit 1, the remaining ten hours in Unit 5 should be used to extend students’ analytical, geotechnical, and quantitative skills. Students are given time to complete their inquiry, manipulate data, and present their findings in a comprehensive fashion. Students review methods in quantitative assessment, such as correlation coefficients and the application of geotechnologies in spatial analysis. In the written report, students demonstrate an awareness of cultural and religious sensitivity and make use of equitable language in reporting their findings. Student/teacher conferencing and frequent assessment during the final ten hours of the course ensure student success.

During this course culminating activity, students are expected to be self-directed learners who achieve excellence, originality, and integrity in their work and support these qualities in the work of others.

#### Unit Overview Chart

Activity	Learning Expectations	Assessment Categories	Focus
1	GIV.01, GIV.02, GIV.03, GI3.02, HE3.01, HE2.05, GI2.01, GI2.04, GI2.05, GI2.06, GI2.07, GI3.03 CGE2b, 2c, 2d, 2e, 3c, 3e, 3f, 4e, 4f, 7g, 7e	Knowledge/ Understanding Thinking/ Inquiry Communication Application	How can geotechnologies be used for analysis and presentation? How can conferencing benefit the inquiry process? What factors contribute to an effective presentation?

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## Teaching/Learning Strategies

The following are some teaching/learning strategies teachers may employ throughout the course.

**Note:** Coded expectations and activity numbers for Unit 1 are included to indicate where the particular strategy may be appropriate.

### Teacher-Directed

- Brainstorming – small or large group generation of initial ideas (SS2.01) – 1.2
- Conferencing – student-to-student or teacher-to-student discussion (GC1.02) – 1.12
- Discussion/Debate – exchange of points of view (SS2.01) – 1.11
- Experiential learning - teachers draw on student experiences (SSV.03) – 1.3
- Classifying – group according to an identified pattern
- Video – visual presentation (SS3.04) – 1.10
- Field Excursion – class trip to reinforce classroom learning (SS3.01) – 1.2
- Games – team quizzes (HE3.01)
- Note Making – summarizing written text, oral descriptions, or film (HE1.01) – 1.10
- Lectures – for the purpose of disseminating knowledge (HEV.02) – 1.4
- Role Playing – immersion of self into other perspectives (GC2.03)

### Independent Study

- Reading – periodicals, articles, journals, newspapers, and magazines for the purpose of furthering knowledge (GC2.03) – 1.2
- Researching – use of a variety of sources (written, graphics, empirical data) for the purpose of supporting an inquiry (SS3.01) – 1.12
- Presentation/Report – oral, written, and visual (GI2.07) – 1.4
- Case Study – investigating a real or simulated situation (HE3.02) – 1.6
- Seminars – oral presentation of an inquiry supported with a variety of presentation tools (film, audio, models, computers) (GI2.07) – 1.11
- Quantitative and Qualitative Assessment – fieldwork methods of data collection (GI2.04) – 1.5
- Geographical Information Systems (GI2.01) – 1.5

### Small-Group Study

- Cooperative Learning – small-group investigation or problem solving (GI3.03) – 1.3
- Poster Making – collective (or individual) approach to depicting a message or promoting a cause (GC1.02)
- Surveys – development of appropriate questionnaires to acquire data related to a geographical issue (SS3.03)

### Presentations

- Guest Speakers – experts in the field (GIV.04) – 1.2
- Mapping – representing physical, demographic, and numerical data through visual forms (GI2.01) – 1.7
- Graphing – visual tool for problem solving (GI2.04) – 1.3
- Diagramming – conceptual visualization (GI2.03)
- Model Building – reproduction of a concept (GIV.03)
- Organizers – creation of cells for the purpose of clustering information (HE3.01) – 1.2
- Quantitative Assessment – prove or disprove an inquiry (GI3.04) – 1.5
- Debates/Discussion (UC1.03) – 1.11

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## Accommodations

Accommodations should be made to help students achieve success in this course. The teacher must become familiar with the Individual Education Plans (IEPs) of exceptional students to learn the specific learning and assessment strategies that work best.

The following accommodations may be considered by the teacher, where appropriate.

- Provide flexible timelines regarding the completion of projects and assignments.
- Contact parent/guardian for support and suggestions.
- Adapt handouts in terms of language, content, font, and font size.
- Arrange for peer assistance.
- Provide a simplified list of terminology prior to the activity.
- Provide oral preplanning of activities.
- Provide opportunities for students to redo all or part of a task.
- Adapt tests and exams as recommended in student's IEP, e.g., time, use of technology, use of a scribe.

Consideration for English As a Second Language students is also necessary. The classroom teacher should be familiar with *The Ontario Curriculum, Grades 9 to 12, English As a Second Language and English Literacy Development, 1999*.

The following accommodations may be considered by the teacher, where appropriate.

- Provide student/teacher conferencing.
- Arrange for peer assistance.
- Combine both written and verbal instructions.
- Highlight keywords/phrases to be incorporated into the "students' dictionary".
- Group students according to first language for brainstorming sessions.
- Allow practice sessions for oral presentations.
- Provide sets of reference notes, outlines, or critical information, as well as models of charts, timelines, and diagrams.
- Reinforce main ideas by using the think/pair/share peer-assessment strategy.
- Videotape student presentations to accommodate listening and writing skills.
- Develop a vocabulary list to accommodate students.

## Resources

Units in this Course Profile make reference to the use of specific texts, magazines, films, videos, and websites. The teachers need to consult their board policies regarding use of any copyrighted materials. Before reproducing materials for student use from printed publications, teachers need to ensure that their board has a Cancopy licence and that this licence covers the resources they wish to use. Before screening videos/films with their students, teachers need to ensure that their board/school has obtained the appropriate public performance videocassette licence from an authorized distributor, e.g., Audio Cine Films Inc. The teachers are reminded that much of the material on the Internet is protected by copyright. The copyright is usually owned by the person or organization that created the work. Reproduction of any work or substantial part of any work from the Internet is not allowed without the permission of the owner.

## Texts

Baerwald, Thomas J. and Celeste Fraser. *World Geography: Building a Global Perspective*. Massachusetts: Prentice Hall, 2000. ISBN 0-13-435990-9

Boehm, Richard G. *World Geography*. Toronto: McGraw-Hill Ryerson, 1997. ISBN 0-02-821713-6

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- Chasmer, Ron and Pamela Perry-Globa. *Facing The Future*. Oxford University Press, 2000. ISBN 19-5411366
- Corbin, Barry, John Trites, and Jim Taylor. *Global Connections: Geography for the 21st Century*. Oxford University Press, 2000. ISBN 19-5413415
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- De Blij, H.J. and Peter O. Muller. *Geography Regions and Concepts, 6th ed.* Toronto: John Wiley and Sons Inc., 1991. ISBN 0-471-51850-6
- Dunlop, Stewart and Michael Jackson. *Understanding Our Environment*. Oxford University Press, 2000. ISBN 19-5412419
- Gilbert, Alan and Josef Gugler. *Cities, Poverty and Development: Urbanization in the Third World*, 2nd ed. Toronto: Oxford University Press, 1993. ISBN 0-19-874161-8
- Hannell, Christine and Stewart Dunlop. *Discovering the Human World*. Toronto: Oxford University Press, 2000. ISBN 19-541344X
- Harshman, Robert and Christine Hannell. *The Human World: A Changing Place*. Toronto: John Wiley and Sons, 1985. ISBN 0-471-79796-0
- Kernahan, Deo, Peter Lawley, James Ellsworth, Sharon Goodland, Sean Dolan, Mark Flumerfelt, Donald Quinlan, and Dennis Des Rivieres. *Exploring World Religions: The Canadian Perspective*. Oxford University Press, 2000. ISBN 19-5416600
- Knox, Paul L. *Places and Regions in a Global Contest: Human Geography*. Prentice Hall, 2001.
- Rowtree, Lester, Marti Lewis, Marie Price, and William Whchoff. *Diversity Amid Globalization*. Prentice Hall, 2000. ISBN 0-13088423-5
- Peterson, Dean R., Delores F. Wundor, and Harlan L. Mueller. *Social Problems: Globalization in the 21st Century*. Prentice Hall, 1999.
- Rubenstein, James M. *The Cultural Landscape: An Introduction to Human Geography*, 2nd ed. Prentice Hall, spring 2002. ISBN 013-0910821-5

### **Atlas Resources**

- Stanford, Quentin, ed. *Canadian Oxford School Atlas, 7th ed.* Oxford University Press, 2000. ISBN 19-5413091

### **Teacher/Classroom Resources**

- Boehm, Richard G. *World Geography, Teacher's Wrap Around Edition*. Toronto: McGraw-Hill Ryerson, 2000. ISBN 0-02-821714-4
- Corbin, Barry, John Trites, and Jim Taylor. *Global Connections: Geography for the 21st Century, Teacher's Resource*. Oxford University Press, 2000. ISBN 19-5413423
- Crewe, James R., Barry Corbin, Malcolm Squires, and John Trites. *World Geography, Teacher's Resource Binder*. Oxford University Press, 2000. ISBN 19-5413121
- Hannell, Christine and Stewart Dunlop. *Discovering the Human World, Teacher's Resource*. Toronto: Oxford University Press, 2000. ISBN 19-5413458
- Smith, Barry and Daniel Francis. *Canadian Oxford School Atlas, 7th Edition, Teacher's Resource*. Oxford University Press, 2000. ISBN 19-5413350

### **Magazines**

- National Geographic, Canadian Geographic, Monograph, Time*

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## CD-ROMs

*National Geographic, ArcView 3.2, ArcCanada 2.0, MFTeach, OAGEE Best of the Monograph.*

## Websites

The URLs for the websites were verified by the writers prior to publication. Given the frequency with which these designations change, teachers should always verify the websites prior to assigning them for student use.

### General

ESRI Canada – <http://www.esricanada.com/k-12/> (Schools and Libraries, GIS support and lessons.)

National Geographic – <http://www.nationalgeographic.org> (Readings, visuals, and case studies of both physical and human geography, as well as human ecology.)

National Geographic Xpeditions – <http://www.nationalgeographic.com/xpeditions/lessons/index.html> (Geography lessons based on advanced academic standards – data, resources, and activities.)

OAGEE – <http://oagee.org/> (resource section. Search can be directed to specific course. Electronic and print resources are rated.)

UNESCO Institute for Statistics – <http://www.uis.unesco.org/> (Up-to-date global data source, activities, and readings suited for a study in human geography.)

United Nations – <http://www.un.org/> (Applicable readings, links, and data).

World Bank – <http://econ.worldbank.org/> (Statistics, readings, and links.)

### Unit 1: Settlement Patterns and Interactions

International Fund for Agricultural Development – <http://www.ifad.org/> (Rural Development Projects database and up-to-date global agricultural projects.)

United Nations Centre for Human Settlement – <http://www.unchs.org/> (The mission of UNCHS (Habitat) is to promote socially and environmentally sustainable human settlements development and the achievement of adequate shelter for all.)

UNCHS: Global Urban Observatory – <http://www.unchs.org/guo/> (An system that contains a set of 23 key indicators and nine lists of qualitative data for 120 cities of the world.)

World Bank: Rural Development Projects – <http://www.worldbank.org/research/projects/rural.htm> (Global examples or rural-to-urban shift patterns and impact.)

World Bank: Urbanization – <http://www.worldbank.org/html/schools/issues/urban.htm> (Large global database, readings, statistics, and present projects for 140 countries of the world. Navigate to Urban Development in the world regions.)

### Unit 2: Human Migration

Centre for Migration Studies – <http://www.cmsny.org/> (Resources and links to NGO and links to UN.)

International Organization for Migration – <http://www.iom.int/index2.htm> (Conduct search on issues related to human migration.)

National Geographic Xpeditions – <http://www.nationalgeographic.com/xpeditions/> (Lesson plans and activities, links to other resources, a good section dealing with Human Migrations.)

### Unit 3: The Dynamics of Culture

Citizenship and Immigration Canada – <http://cwr.utoronto.ca/cultural/> (Cultural Profiles – background information on societies of the world and a navigation map.)

Cultural Survival – <http://www.cs.org/> (Articles, links, and up-to-date accounts of cultural preservation and loss.)

UN Refugee Agency – <http://www.unhr.ch/cgi-bin/texis/utx/home> (Resource on issues related to refugees around the world.)

UNESCO – <http://www.unesco.org/> (Cultural data, links, and search abilities.)

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#### **Unit 4: Globalization**

International Monetary Fund – <http://www.imf.org/external/np/exr/ib/2000/041200.htm> (Globalization: threat or opportunity? – forum report, links, and support.)

World Bank – <http://econ.worldbank.org/> (The benefits and drawbacks of global economic activity.)

World Trade Organization – <http://www.wto.org/> (Navigate to search for *globalization* – many articles, documents, and sites for further investigation.)

#### **Unit 5: Human Geography Culminating Activity – Independent Inquiry**

Statistics Canada – <http://www.statcan.ca/english/Pgdb/Land/geogra.htm> (Data tables on Canada’s land area, resources, water, and weather.)

UNCHS: Best Practices – <http://www.bestpractices.org/> (Human settlement database.)

UNCHS: Sustainable Development – <http://www.sustainabledevelopment.org/blp/> (Search all topics related to world geography and human interactions.)

#### **OSS Considerations**

Upon the successful completion of this course, students may earn either an additional compulsory credit or an optional course credit towards graduation. This profile was designed to prepare and equip students with the knowledge and skills they need to meet the entrance requirements for university programs.

Teaching and learning emphasize theoretical aspects of the course as well as an opportunity for concrete application. The course expectations are rigorous and students are expected to demonstrate an ability to use both independent learning skills and independent research skills. During the delivery of this course, teachers take opportunities to educate students about the potential of geographic studies at the postsecondary level. Expectations GIV.04 and GI3.05 specifically make reference to postsecondary and employment opportunities in Human Geography. Geography is a discipline that promotes and demands analysis. Students should be presented with tasks that employ computers and software, allowing for spatial assessment and quantitative analysis. The use of Geographic Information Systems, Geographic Positioning devices, and spreadsheet software in the creation of graphs and in the calculation of correlation techniques prepares students for further studies in this discipline.

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# Coded Expectations, World Geography: Human Patterns and Interactions, Grade 12, University Preparation, CGU4U

## Geographic Foundations: Space and Systems

### Overall Expectations

- SSV.01** · analyse the characteristics of selected ecumenes (settled environments) and explain why they differ from place to place and from one period of time to another;
- SSV.02** · demonstrate an understanding of basic concepts of spatial interaction and analyse the impact of spatial factors on human systems;
- SSV.03** · explain the influence of social, political, cultural, and economic factors on human environments and activities.

### Specific Expectations

#### Understanding Concepts

- SS1.01** – compare the capacity of selected ecumenes in the past and in the present to meet human needs;
- SS1.02** – demonstrate an understanding of concepts of spatial interaction (e.g., intervening opportunities, complementarity, distance decay) and use them to explain patterns of movement and interactions between places (e.g., trade patterns, transportation patterns);
- SS1.03** – identify boundaries according to type (e.g., natural, artificial, antecedent, subsequent);
- SS1.04** – explain how culture (e.g., religion, gender roles, social values, food preferences) and function (e.g., finance, trade, government, education, manufacturing) affect the characteristics of a place.

#### Developing and Practising Skills

- SS2.01** – explain why groups of people in similar environments (e.g., deserts) may have different ways of life;
- SS2.02** – explain how and why national and regional boundaries evolve.

#### Learning Through Application

- SS3.01** – analyse a major geographic characteristic of the Great Lakes megalopolis (e.g., spatial organization, urban systems, demography) and determine the factors that have shaped its present pattern;
- SS3.02** – explain selected movements of goods and people, using concepts of spatial interaction;
- SS3.03** – produce a case study to show how characteristics of their local area have evolved to meet changing human needs;
- SS3.04** – assess the influence of different cultures on their local area (e.g., cultural centres, food, celebrations, customs).

## Human-Environment Interactions

### Overall Expectations

- HEV.01** · explain how humans have modified the natural environment;
- HEV.02** · evaluate the impact of mass migrations on ecosystems;
- HEV.03** · analyse the effects of large-scale rural-to-urban migration on the environments of urban areas;
- HEV.04** · explain how the natural environment and natural phenomena affect human activities.

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## Specific Expectations

### Understanding Concepts

**HE1.01** – identify examples from each continent of positive and negative effects of human activities on the natural environment;

**HE1.02** – describe selected examples of distinctive alterations of the physical environment by humans (e.g., terraced hillsides of Thailand, polders in the Netherlands) and explain the reasons for these adaptations;

**HE1.03** – describe how landforms, climate, soils, and vegetation influence settlement patterns;

**HE1.04** – demonstrate an understanding of the locational advantages and disadvantages of different sites for human activities (e.g., Nile or Brahmaputra flood plains, coastal wetland zones, river crossings).

### Developing and Practising Skills

**HE2.01** – analyse the advantages and disadvantages of intensive human use of selected physical features (e.g., Yellow River valley);

**HE2.02** – evaluate the impacts of urbanization on selected environments (e.g., air pollution in Los Angeles or Hong Kong, slums in Mexico City);

**HE2.03** – analyse the effects of mass migrations on various terrestrial ecosystems;

**HE2.04** – explain the reasons causing people to leave rural areas and move to cities in large numbers and the consequences of these movements for rural and urban landscapes;

**HE2.05** – explain why various environments have differing capacities to support population growth and industrial development.

### Learning Through Application

**HE3.01** – assess the costs and benefits of a solution to national or regional development needs that involves major environmental changes (e.g., China’s Three Gorges project), taking into consideration short- and long-term economic and environmental consequences and human impacts;

**HE3.02** – produce a case study that analyses an aspect of human-environment interaction in their local area;

**HE3.03** – produce a case study of the effects of human migration on selected ecosystems (e.g., refugee movements into fragile environments in Africa or Asia);

**HE3.04** – explain how natural hazards (e.g., drought, flooding, typhoons, landslides, earthquakes) and environmental problems caused by human activities (e.g., oil spills, acid rain) affect development in selected regions.

## Global Connections

### Overall Expectations

**GCV.01** · analyse the impact of culture on settlement patterns and human activities;

**GCV.02** · analyse the factors influencing cultural/economic convergence and divergence;

**GCV.03** · evaluate the effects of the information revolution, technological progress, and global trade on world regions.

### Specific Expectations

#### Understanding Concepts

**GC1.01** – explain how cultural characteristics (e.g., religion, language, ethnicity) act as linking factors within and between regions;

**GC1.02** – explain the role of international organizations (e.g., United Nations, World Bank, World Health Organization, Red Cross, Amnesty International) in fostering contact between world peoples;

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- GC1.03** – identify cultural and economic factors that trigger conflict or ecological disintegration (e.g., national, ethnic, and religious differences, unequal resource distribution, trade blocs);
- GC1.04** – explain how technology contributes to cultural/economic convergence (e.g., facilitation of cross-cultural contact) and divergence (e.g., reinforcement of nationalism, religious fundamentalism, cultural separation, economic protectionism).

### **Developing and Practising Skills**

- GC2.01** – analyse examples of the influence of culture on human activities (e.g., pilgrimages, tourism);
- GC2.02** – analyse examples of social phenomena that contribute to cultural and economic convergence (e.g., widespread use of English in business, ethnic quarters in large cities, cultural associations and centres), peace, and good international relations;
- GC2.03** – explain how people in different countries can work together to solve international problems (e.g., the Land Mine Treaty campaign);
- GC2.04** – assess the impact of technological change in a region of the world.

### **Learning Through Application**

- GC3.01** – analyse selected settlement patterns around the world to show how they have been influenced by cultural factors (e.g., inheritance systems, land settlement systems);
- GC3.02** – compare economic opportunities for men, women, and children in selected regions or countries (e.g., Canada, North Africa, Scandinavia, Japan);
- GC3.03** – evaluate the role of international organizations in maintaining peace between countries (e.g., United Nations, North Atlantic Treaty Organization, economic organizations);
- GC3.04** – explain the role played by culture and economics in selected incidents of conflict or cooperation;
- GC3.05** – conduct a case study of a country that depends on a single resource (e.g., oil in Nigeria or a Middle Eastern country) to illustrate the positive and negative impacts of this type of economy on cultural, political, and social life.

## **Understanding and Managing Change**

### **Overall Expectations**

- UCV.01** · demonstrate an understanding of human migrations and their causes and effects;
- UCV.02** · demonstrate an understanding of regional economic disparities and factors affecting them;
- UCV.03** · assess the effectiveness of measures to alleviate regional economic disparities and conflict.

### **Specific Expectations**

#### **Understanding Concepts**

- UC1.01** – identify different types of migration (e.g., immigration, forced migration, economic migration, seasonal migration);
- UC1.02** – explain how international migrations are affected by political conditions, economic incentives, and religious and family ties;
- UC1.03** – explain how government policies can either encourage or discourage mass migrations;
- UC1.04** – identify world regions that have experienced considerable international migration and explain the reasons for those movements;
- UC1.05** – explain what is meant by regional economic disparities and identify examples in different parts of the world;
- UC1.06** – explain the consequences of being a landlocked country (e.g., with respect to imports/exports, sharing of offshore resources) and describe how such a country responds to its position (e.g., Switzerland, Rwanda, Luxembourg).

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### **Developing and Practising Skills**

- UC2.01 – analyse the causes of selected great migrations of history and explain their effects on settlement patterns;
- UC2.02 – evaluate the positive and negative aspects of migration policies on human movements;
- UC2.03 – describe how mass migrations influence the spread of cultures and affect understanding between peoples;
- UC2.04 – analyse the causes of selected examples of regional economic disparity;
- UC2.05 – explain, through the analysis of selected examples, the relationship between population movements and economic disparities;
- UC2.06 – analyse selected social and economic changes in a rural region of the world;
- UC2.07 – explain how international aid has brought about change in disadvantaged countries;
- UC2.08 – propose solutions to selected boundary conflicts and internal disputes.

### **Learning Through Application**

- UC3.01 – explain why push factors are more significant contributors to international migration today than pull factors;
- UC3.02 – evaluate the political, economic, and social impacts of a selected development project on the ability of people to control their land and lifestyles;
- UC3.03 – produce a case study of regional planning in a developing country aimed at reducing regional disparities and improving economic and social well-being.

## **Methods of Geographic Inquiry**

### **Overall Expectations**

- GIV.01 · apply geographic skills, methods, and technologies to gather, analyse, synthesize, and communicate information on world geography;
- GIV.02 · conduct an independent inquiry that applies geographic knowledge, skills, and methods effectively to a study of places and human patterns;
- GIV.03 · use forecasting, problem-solving, and decision-making models to develop solutions for geographic issues and problems;
- GIV.04 · evaluate career options in human geography and related social sciences.

### **Specific Expectations**

#### **Understanding Concepts**

- GI1.01 – explain how geographic knowledge and skills and geotechnologies can contribute to the resolution of major world social and economic problems;
- GI1.02 – identify careers that require knowledge and skills related to the study of human geography.

#### **Developing and Practising Skills**

- GI2.01 – analyse and synthesize information from remote sensing, geographic information systems, and maps and present conclusions;
- GI2.02 – use sequences of maps, aerial photographs, and satellite images as a basis for describing, comparing, and analysing changes over time and for making predictions about trends and patterns in human geography;
- GI2.03 – illustrate global human patterns, using a variety of thematic mapping techniques (e.g., proportional flow lines, choropleths);
- GI2.04 – use statistical analysis techniques (e.g., correlational analysis) to analyse and interpret data;

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**GI2.05** – choose the most appropriate methods for forecasting, problem solving, and decision making to support their independent study;

**GI2.06** – assess the relevance and bias of information gathered from different sources;

**GI2.07** – use written, oral, and visual communication skills to present the results of geographic inquiry and analysis effectively.

**Learning Through Application**

**GI3.01** – evaluate the positions of different groups on selected issues related to human geography;

**GI3.02** – conduct an independent inquiry on a political, economic, cultural, or social issue related to a region or nation in Africa, Asia, or Oceania, using key concepts and methods presented in the course;

**GI3.03** – describe practical and community-related applications of the conclusions reached in the independent inquiry;

**GI3.04** – forecast future trends relating to a selected issue in human geography (e.g., rural-to-urban migration in Asia);

**GI3.05** – analyse educational requirements, job descriptions, current opportunities, and future prospects for a selected career related to human geography.

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## Ontario Catholic School Graduate Expectations

The graduate is expected to be:

**A Discerning Believer Formed in the Catholic Faith Community** who

- CGE1a** -illustrates a basic understanding of the **saving story** of our Christian faith;
- CGE1b** -participates in the **sacramental life** of the church and demonstrates an understanding of the centrality of the Eucharist to our Catholic story;
- CGE1c** -actively reflects on **God’s Word** as communicated through the Hebrew and Christian scriptures;
- CGE1d** -develops attitudes and values founded on Catholic **social teaching** and acts to promote social responsibility, human solidarity and the common good;
- CGE1e** -speaks the **language of life**... “recognizing that life is an unearned gift and that a person entrusted with life does not own it but that one is called to protect and cherish it.” (Witnesses to Faith)
- CGE1f** -seeks intimacy with God and celebrates **communion** with God, others and creation through prayer and worship;
- CGE1g** -understands that one’s purpose or **call in life** comes from God and strives to discern and live out this call throughout life’s journey;
- CGE1h** -respects the **faith traditions**, world religions and the life-journeys of **all people of good will**;
- CGE1i** -integrates faith with life;
- CGE1j** -recognizes that “sin, human weakness, conflict and forgiveness are part of the human journey” and that the cross, the ultimate sign of forgiveness is at the heart of **redemption**. (Witnesses to Faith)

**An Effective Communicator** who

- CGE2a** -listens actively and critically to understand and learn in light of gospel values;
- CGE2b** -reads, understands and uses written materials effectively;
- CGE2c** -presents information and ideas clearly and honestly and with sensitivity to others;
- CGE2d** -writes and speaks fluently one or both of Canada’s official languages;
- CGE2e** -uses and integrates the Catholic faith tradition, in the critical analysis of the arts, media, technology and information systems to enhance the quality of life.

**A Reflective and Creative Thinker** who

- CGE3a** -recognizes there is more grace in our world than sin and that hope is essential in facing all challenges;
- CGE3b** -creates, adapts, evaluates new ideas in light of the common good;
- CGE3c** -thinks reflectively and creatively to evaluate situations and solve problems;
- CGE3d** -makes decisions in light of gospel values with an informed moral conscience;
- CGE3e** -adopts a holistic approach to life by integrating learning from various subject areas and experience;
- CGE3f** -examines, evaluates and applies knowledge of interdependent systems (physical, political, ethical, socio-economic and ecological) for the development of a just and compassionate society.

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**A Self-Directed, Responsible, Life Long Learner** who

- CGE4a** -demonstrates a confident and positive sense of self and respect for the dignity and welfare of others;
- CGE4b** -demonstrates flexibility and adaptability;
- CGE4c** -takes initiative and demonstrates Christian leadership;
- CGE4d** -responds to, manages and constructively influences change in a discerning manner;
- CGE4e** -sets appropriate goals and priorities in school, work and personal life;
- CGE4f** -applies effective communication, decision-making, problem-solving, time and resource management skills;
- CGE4g** -examines and reflects on one's personal values, abilities and aspirations influencing life's choices and opportunities;
- CGE4h** -participates in leisure and fitness activities for a balanced and healthy lifestyle.

**A Collaborative Contributor** who

- CGE5a** -works effectively as an interdependent team member;
- CGE5b** -thinks critically about the meaning and purpose of work;
- CGE5c** -develops one's God-given potential and makes a meaningful contribution to society;
- CGE5d** -finds meaning, dignity, fulfillment and vocation in work which contributes to the common good;
- CGE5e** -respects the rights, responsibilities and contributions of self and others;
- CGE5f** -exercises Christian leadership in the achievement of individual and group goals;
- CGE5g** -achieves excellence, originality, and integrity in one's own work and supports these qualities in the work of others;
- CGE5h** -applies skills for employability, self-employment and entrepreneurship relative to Christian vocation.

**A Caring Family Member** who

- CGE6a** -relates to family members in a loving, compassionate and respectful manner;
- CGE6b** -recognizes human intimacy and sexuality as God given gifts, to be used as the creator intended;
- CGE6c** -values and honours the important role of the family in society;
- CGE6d** -values and nurtures opportunities for family prayer;
- CGE6e** -ministers to the family, school, parish, and wider community through service.

**A Responsible Citizen** who

- CGE7a** -acts morally and legally as a person formed in Catholic traditions;
- CGE7b** -accepts accountability for one's own actions;
- CGE7c** -seeks and grants forgiveness;
- CGE7d** -promotes the sacredness of life;
- CGE7e** -witnesses Catholic social teaching by promoting equality, democracy, and solidarity for a just, peaceful and compassionate society;
- CGE7f** -respects and affirms the diversity and interdependence of the world's peoples and cultures;
- CGE7g** -respects and understands the history, cultural heritage and pluralism of today's contemporary society;
- CGE7h** -exercises the rights and responsibilities of Canadian citizenship;
- CGE7i** -respects the environment and uses resources wisely;
- CGE7j** -contributes to the common good.

# Unit 1: Settlement Patterns and Interactions

**Time:** 23 hours plus 2 hours CA

## Unit Description

An *ecumene* can be defined as a settled environment. Although ecumenes consume a relatively small amount of the earth’s surface, the impact they have on both humans and the surrounding environment is considerable. In this unit, students examine the physical, social, cultural, and political factors that contribute to the formation of various settlement patterns. Students assess the ability of selected settlements, both in the present and past, to meet human needs. Students evaluate the impact concentrations of people have on a physical site as well as the role physical phenomena play in the form and function of a community. To support their studies, students use examples drawn from North, Central, and South America; Eastern and Western Europe; Asia; and Africa. Students apply effective communication, decision-making, problem-solving, time, and resource-management skills to ensure their success. Students employ both spatial and quantitative skills to determine why some ecumenes have grown and flourished while others have succumbed to the pressures of population growth. Finally, students create a case study of a present-day settlement in which humans have altered the physical site to meet their needs. Students are reflective and creative thinkers who examine, evaluate, and apply their knowledge of interdependent systems for their development as just, compassionate individuals in our global society.

## Unit Synopsis Chart

K/U = Knowledge/Understanding, C = Communication, T/I = Thinking/Inquiry, A = Application

Activity	Time	Learning Expectations	Assessment Categories	Tasks
<i>What are ecumenes? How have they developed?</i>				
1.1 Human Geography – The Tools, the Methods, and the Study	2.5 hours	SSV.01, SSV.03, GIV.01, GI2.03, SSV.02 CGE2b	K/U A	Students identify and collect the tools necessary to conduct a study in Human Geography. They define physical and cultural geography and determine the relationship between the two disciplines. They select an ecumene and answer four fundamental questions about it.
1.2 An Ecumene – Identifying Common Characteristics	2.5 hours	SS3.03, GI3.03, SSV.03 CGE5g	K/U T/I C A	Students work to create a list that completes the sentence: “All populated settlements...,” e.g., possess a history, contain people etc. They use the list to complete a brief study of their own community and chart their results.
1.3 Rural Settlements – Origins and Change	1.25 hours	SS1.01, SSV.03, SSV.01, HEV.03, GI2.01, GIV.01, GI2.02 CGE3c	K/U T/I C A	Students differentiate between two types of rural settlement. They create a spatial gradient map to determine the percentage of the population for each country that engages in agricultural activity. Students use a spreadsheet program to graph the rural/urban shift over time.

Activity	Time	Learning Expectations	Assessment Categories	Tasks
1.4 Urban Environments – Growth, Patterns, and Change	1.25 hours	SSV.01, SS1.02, GI1.01, GI2.02, SS3.01 CGE4b	K/U T/I C A	Students differentiate between the growth of urban centres in developed and developing areas. Students research the work of Walter Christaller, attempt to prove his theory correct, and suggest reasons for less-than-perfect results in modern times. Students assess the form and function of internal urban patterns.
1.5 Global Settlement Patterns – Density and Distribution (Lab Activity)	2.5 hours	HE2.05, GIV.01, GI2.01, GI2.03, GI2.04 CGE3b	A T/I C	Students use GIS to describe the global pattern of population distribution. They compare this distribution with thematic maps and draw conclusions. They assess the relationship between population growth and quality of life by calculating the coefficient of correlation between two variables. They determine the strength of the relationship and suggest reasons for less-than-perfect correlation.
1.6 Changing Patterns – Meeting Human Needs	1.25 hours	HEV.01, HE2.01, GI2.07 CGE5g	K/U T/I C	Students create an organizer of three major projects that were responses to population growth and changing human needs, e.g., St. Lawrence Seaway, Columbia water project, polders of the Netherlands, Panama Canal, Aswan Dam, Narmada project in India, the terraced hillsides of Thailand.
<i>How does the physical environment affect settlement patterns?</i>				
1.7 The Physical Site – Forming Patterns	1.75 hours	HE1.03, UC1.06, GI2.01, GI2.03 CGE7i	K/U T/I C A	Using thematic maps, students identify spatial patterns and correlations between global population distribution and landforms, climate, soils, vegetation, and latitude. With the use of GIS, students conduct a cost/benefit analysis between landlocked and coastal settlements.
1.8 Defining Regions and Creating Boundaries	1.75 hours	SSI.03, SS2.02, GI2.01, GI2.05 CGE5e	T/I C A	Students differentiate between actual and perceived boundaries. They use political and physical maps to identify boundaries influenced by natural phenomena and boundaries that are the result of human decisions. They determine if a boundary was primarily influenced by geography, culture, religion, language, ethnicity, economics, or political ideology.

Activity	Time	Learning Expectations	Assessment Categories	Tasks
1.9 Natural Resources and Settlement Patterns	1.25 hours	GC3.05, GI2.01, GI2.07, HE2.05, HE2.01, HE1.03, HE1.01 CGE7i	K/U T/I C	Students compare global settlement patterns to the global distribution of metallic minerals, mineral fuels, and non-mineral resources. They read a case study of a community dependent on a single natural resource for survival and report their findings in essay form.
1.10 Dealing With Extremes - The Effects of Natural Disasters on Settlement Patterns	1.25 hours	HE1.04, HE3.04, HEV.04, GI2.07, GI2.06 CGE1e, 7d	K/U T/I C	Students view a video on volcanoes to assess the impact an eruption will have on a settled area. Students note the differences/variation in disasters as they relate to the impact on social, economic, and physical attributes of each area.
<i>In what ways do human activities influence settled environments?</i>				
1.11 Human Activities - Influencing Settlement Patterns (a) Human Culture (b) Human Function	2.0 hours	SSV.01, SS2.01, GCV.01, SS1.04, GI3.01, GC3.01 CGE4c, 5e	K/U T/I C	Students conduct a comparative study of the Yanomami of the Amazon and the city dwellers of Brazil and Venezuela - human settlements that are products of human culture and function yet worlds apart in technological development. Students assess the impact the societies have on their environment as well as the impact they have on each other. Students debate the future of the settlements and rate their ability to meet the needs of their societies
1.12 Human Activities that Affect the Site and Development of a Settlement (Culminating Activity)	3.75 hours	GC2.04, HE1.01, GIV.02, GI2.01, GI2.05, GI2.07, GI3.02, HE1.02, GC3.01 CGE4e	K/U T/I C A	Students create a case study of a present-day settlement in which humans have altered the physical site to meet their needs. Students critically analyse the alterations, conduct a cost/benefit analysis, and suggest an alternative action. Students employ quantitative methodologies and geotechnologies to identify the positive and negative effects of the adaptations. Students present their findings. Topics may include: reclaiming the sea in Japan, urban sprawl in Brazil, deforestation in Madagascar, international networks in Japan, the “Big Dig” in Boston, Hibernia, North Sea Oil, and Three Gorges Project in China.

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## Activity 1.1: Human Geography – The Tools, the Methods, and the Study

Time: 2.5 hours

### Description

A geographer, like any scientist, must possess the fundamental tools of the trade before engaging in an inquiry. A study in human patterns and interactions necessitates the knowledge of all geographic studies as well as an ability to use geotechnologies for the purpose of inquiry and presentations. Considering the scope of this course, the first task for students is to be equipped with the maps, data, and vocabulary necessary to conduct a complex global study. In this introductory activity, students identify and collect the tools necessary to conduct a study in human geography. It is essential that students are able to read, understand, and use written materials effectively. Students define the terms physical geography and cultural geography and determine the relationship between the two disciplines. They select an ecumene of their choice and answer four fundamental questions about the settlement.

### Strand(s) & Learning Expectations

#### Ontario Catholic School Graduate Expectations

CGE2b - read, understand, and use written materials effectively.

**Strand(s):** Geographic Foundations: Space and Systems, Methods of Geographic Inquiry

#### Overall Expectations

SSV.01 - analyse the characteristics of selected ecumenes (settled environments) and explain why they differ from place to place and from one period of time to another;

SSV.02 - demonstrate an understanding of basic concepts of spatial interaction and analyse the impact of spatial factors on human systems;

SSV.03 - explain the influence of social, political, cultural, and economic factors on human environments and activities;

GIV.01 - apply geographic skills, methods, and technologies to gather, analyse, synthesize, and communicate information on world geography.

#### Specific Expectations

GI2.03 - illustrate global human patterns, using a variety of thematic mapping techniques (e.g., proportional flow lines, choropleths).

### Prior Knowledge & Skills

- interpreting thematic maps
- map reading and conventional practices
- review GIS and conventional map skills
- graphing styles/reading tables
- latitude and longitude
- correlation analysis

### Planning Notes

- Decide whether to provide resources or direct students to resources.
- Locate up-to-date global data and thematic maps.
- Ensure students have access to newspapers or adjust task to accommodate site selection.
- Prepare a checklist for inventory.
- Access computers with *ArcView 3.2* for demonstration purposes.
- Vocabulary required – thematic maps, geotechnologies, absolute location, relative location, cultural ecology, physical geography, human geography, quantitative methods, demography
- Career profile to discuss – Demographer

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## Teaching/Learning Strategies

1. Without prompting, students write down a description of their country of origin and a description of themselves as a member of the country. Students present their efforts to the class. The fact that some classrooms may be culturally diverse while others are quite homogeneous is immaterial; the similarities provide the content for discussion, e.g., all cultures desire basic needs, engage in economies, possess history, defend their values. These physical, cultural, and social variables provide the basis for a study in human geography and interactions. **Note:** Teachers should be sensitive to the personal nature of the experience and support students in avoiding disclosure and discussion of sensitive issues.
2. With assistance, students collectively define the terms *physical geography* and *human geography* for the purpose of understanding these two components of cultural ecology – the association between human activities and the physical environment.
3. Equipped with basic vocabulary, students need to equip themselves with the necessary tools. The teacher may take one of two approaches. Using the inventory checklist of maps and data required for further study (see Appendix 1), the teacher may provide textbooks, atlases, and electronic sites. Alternatively, students may create their own portfolio of essential tools.
4. Manipulating the information to conduct an inquiry is an integral part of any geographic study. If the opportunity arises the teacher should review basic GIS, mapping, graphing skills, and quantitative methods. The checklist in Appendix 1 provides a list of skills that are used throughout the course.
5. With the use of actual examples and reference to the tools students have collected, the teacher and students discuss the information required for assessment of a human settlement (a local, regional, national, or global example may be used):
  - a description of the site in both absolute and relative terms (map analysis – latitude and longitude);
  - a physical description of the site and a demographic study of the population (tables and graphs);
  - an analysis of the human/environment relationship (GIS, Correlation Analysis);
  - an analysis of linkages and networks within the settlement and within the region (case study).
6. To complete their introduction of this senior level study, students select a newspaper article that makes reference to a country on another continent. Students answer the following questions:
  - Where is the country located in absolute and relative terms?
  - What are the physical and human characteristics of this location that make it unique?
  - Who lives in the country?
  - How do people impact the area?

## Assessment & Evaluation of Student Achievement

- Use the checklist in Appendix 1 to assess students' collection of maps, data, and resource material for completeness; alter the checklist and use rating scale to assess quality of collected resources.
- Group conference to assess four questions (K/U and T/I); assess students' ability to demonstrate an understanding of vocabulary and concepts, e.g., absolute and relative location, physical and human characteristics.

### Enrichment Opportunity

With the maps and data collected, students attempt to divide the world into regions. They may use no fewer than four, and no more than ten, divisions. Students rationalize their divisions and present their suggestions to the class for constructive critique.

## Accommodations

- Provide summary notes and a list of simplified terms prior to activity.
- Provide a flexible timeline for completion of this activity.
- Arrange for peers to assist in the collection of maps and written information.

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## Resources

### Text

Baerwald, Thomas J. and Celeste Fraser. *World Geography: Building a Global Perspective*. Massachusetts: Prentice Hall, 2000. (Thematic maps and up-to-date data)

Chasmer, Ron, and Pamela Perry-Globa. *Facing The Future*. Oxford University Press, 2000.

Corbin, Barry, John Trites, and Jim Taylor. *Global Connections: Geography for the 21st Century*. Oxford University Press, 2000.

Crewe, James R., Barry Corbin, Malcolm Squires, and John Trites. *World Geography – Teacher’s Resource Binder*. Oxford University Press, 2000.

Crewe, James R., Barry Corbin, Malcolm Squires, and John Trites. *World Geography*. Oxford University Press, 2000.

Stanford, Quentin, ed. *Canadian Oxford School Atlas*, 7th ed. Oxford University Press, 2000.

### Websites

ESRI - Canada - Schools and Libraries – [www.esricanada.com](http://www.esricanada.com)

<http://cwr.utoronto.ca/cultural/> - cultural profiles

OAGEE - <http://oagee.org/>

Stats Canada – <http://www.statcan.ca/>

UNESCO – Institute for Statistics - <http://www.uis.unesco.org/>

United Nations - <http://www.un.org/>

## Activity 1.2: An Ecumene – Identifying Common Characteristics

**Time:** 2.5 hours

### Description

An *ecumene* is defined as a settled area. The characteristics of the earth’s settled areas are a reflection of historical events, physical phenomena, and human activity that is subject to planned and unplanned change. Students begin their study of settlement by identifying four historical reasons for the development of human communities. They create a list of factors that are common to all settlement regardless of size or location. Students use these factors to complete a study of their own community’s site, situation, form and function. Students are expected achieve excellence, originality, and integrity in their own work and support these qualities in the work of others.

### Strand(s) & Learning Expectations

#### Ontario Catholic School Graduate Expectations

CGE5e - respect the rights, responsibilities, and contributions of self and others.

**Strand(s):** Geographic Foundations: Space and Systems, Methods of Geographic Inquiry

#### Overall Expectations

SSV.03 - explain the influence of social, political, cultural, and economic factors on human environments and activities.

#### Specific Expectations

SS3.03 - produce a case study to show how characteristics of their local area have evolved to meet changing human needs;

GI3.03 - describe practical and community-related applications of the conclusions reached in the independent inquiry.

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## Prior Knowledge & Skills

- Grade 9 Geography section on settlement patterns
- report writing
- creating an organizer
- creating summary notes

## Planning Notes

- Obtain materials to establish historic reasons for settlement and select examples for each factor.
- Prepare a visual presentation of settlements using presentation software, e.g., *PowerPoint*, *Corel Presentations*.
- Review construction of an organizer and components of a case study.
- Compile a list of community sources for historical site information and obtain topographic maps.
- Vocabulary required – site, situation, form, function, ecumene
- Career profile to discuss – Historical Geographer

## Teaching/Learning Strategies

1. With the use of visuals, readings, and lecture, students develop an understanding that, historically, settlements were generally established for religious, cultural, political, or economic reasons.
2. The teacher uses technology to present the information, providing students with an example of how they could display their work in future assignments.
3. Students work in groups to identify the fundamental characteristics of any settlement. Their lists are created by completing the sentence: “All populated settlements...” Suggestions may include:
  - possess a history;
  - contain people;
  - were established to meet collective human needs;
  - have a shape that is determined by both human activities and physical characteristics;
  - impact the natural environment;
  - are affected by natural conditions;
  - are subject to change over time;
  - engage in an economy;
  - have collective values, morals, laws, and traditions;
  - are governed formally and informally;
  - exist in an absolute location as well as in a larger region;
  - are contained by both actual and perceived boundaries;
  - are connected and networked both internally and externally.
4. Students use these factors to assess the form, function, site, situation, origin, development, and history of their own community. Students make use of topographic maps, the school library/resource centre, and community resource centre, as well as human resources, e.g., parents/guardians, teachers, and community leaders. They create an organizer to collect their information and determine if the origin of their community was religiously, culturally, politically, or economically derived.
5. With the use of their organizer, students convert their collected points into a case study.

## Assessment & Evaluation of Student Achievement

- Construct a rubric to assess the design of the organizer and students’ ability to effectively communicate summary points; provide feedback on success and direction for improvement (C).
- Create anecdotal records of students’ ability to apply the inquiry process to a new situation (A).

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## Accommodations

- Provide a flexible timeline for submission of written report.
- Arrange peer assistance for construction of the organizer.
- Adapt strategies and evaluations as recommended in students' IEPs.

### Enrichment Opportunity

- Students seek out a local historian to further their knowledge of their local community. They conduct an interview and create a video portfolio to share their findings with the class.
- Students visit the Geography Department of a local university to determine how a study in World Geography is beneficial for both those who study geography and for those in other disciplines. If possible, the visit could be to the university's website. E-mail correspondence with department liaison officer may provide the necessary information.

## Resources (dependent upon location of study)

### General Resources – Text

Baerwald, Thomas J. and Celeste Fraser. *World Geography: Building a Global Perspective*. Massachusetts: Prentice Hall, 2000.

Boehm, Richard G. *World Geography*. Toronto: McGraw-Hill Ryerson, 2000.

### Video

Check local libraries for community film productions or, for larger centres, check Travel and Tourism, libraries, archives, and bookstores.

### Websites

Stats Canada – <http://www.statcan.ca/>

Community website (e.g., <http://www.city.toronto.on.ca/>)

## Activity 1.3: Rural Settlements – Origins and Change

**Time:** 1.25 hours

### Description

Patterns of human settlement generally fall into a form of either rural or urban development. In this activity, students identify the characteristics of rural settlement patterns and assess their relationship with agricultural activities. Students compare the rural settlement of the past and present in both developed and developing nations. Students differentiate between two types of rural settlement. They create a spatial gradient map to determine the percentage of the population for selected countries of the world that engage in agricultural activity. They complete the analysis by using a spreadsheet program to graph the rural/urban shift over time.

### Strand(s) & Learning Expectations

#### Ontario Catholic School Graduate Expectations

CGE3c - think reflectively and creatively to evaluate situations and solve problems.

**Strand(s):** Geographic Foundations: Space and Systems, Methods of Geographic Inquiry, Understanding and Managing Change

#### Overall Expectations

SSV.03 - explain the influence of social, political, cultural, and economic factors on human environments and activities;

SSV.01 - analyse the characteristics of selected ecumenes (settled environments) and explain why they differ from place to place and from one period of time to another;

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HEV.03 - analyse the effects of large-scale rural-to-urban migration on the environments of urban areas;  
GIV.01 - apply geographic skills, methods, and technologies to gather, analyse, synthesize, and communicate information on world geography.

### **Specific Expectations**

SS1.01 - compare the capacity of selected ecumenes in the past and in the present to meet human needs;

GI2.01 - analyse and synthesize information from remote sensing, geographic information systems, and maps and present conclusions;

GI2.02 - use sequences of maps, aerial photographs, and satellite images as a basis for describing, comparing, and analysing changes over time and for making predictions about trends and patterns in human geography.

### **Prior Knowledge & Skills**

- Grade 9 Geography – rural settlement patterns
- graded-shading (spatial gradient) maps
- spreadsheet construction and use

### **Planning Notes**

- Obtain topographic maps to illustrate geographic terms and themes.
- Review with students the use of spreadsheet programs (e.g., *Excel*).
- Create an example of a gradient map to show students expected results.
- Vocabulary required – spreadsheet, rural, urban, spatial gradient map, linear and circular settlement patterns, rural/urban shift, industrial revolution, agricultural revolution, economic revolution, technological revolution
- Career profile to discuss – Agronomist, Genetic Engineer, Regional Planner

### **Teaching/Learning Strategies**

1. Although many students may have little or no experience with rural living in Canada or abroad, begin by having students describe their perceptions of a rural community. Students use a single word to describe a rural environment and the suggestions are recorded. Collectively, students select descriptors for conducting a qualitative study and descriptors for conducting a quantitative study of the rural landscape, e.g., lifestyle vs. income.
2. Origin – Students begin by assessing the two general forms rural communities create on the landscape: circular and linear. With the use of topographic maps and historical and modern-day examples, students examine the physical, social, religious, cultural, economic, and political reasons for such imprints. The teacher elaborates with the use of one example for each variable.
3. Change – The teacher selects examples of great migrations in history and discusses with students the reasons for mass movements and the impact on the points of destination. The discussions should be introductory in nature; a deeper analysis takes place in Unit 2. Students note that the rural environment has undergone drastic change in the last 100 years. The rural-to-urban shift has occurred for a variety of economic and industrial reasons. The urban influx is also the result of technological advancements in the agricultural industry. Students create a spatial gradient map that displays the percentage of the population in selected countries that engage directly in agricultural activities.
4. Using a spreadsheet program, the teacher reviews the use of spreadsheets with students. The teacher provides students with data that reflects the rural-to-urban shift over time. Students create a line graph that displays the rural/urban shift over time. After properly labelling the graph, students describe the pattern and attempt to explain the reasons for the slope of the line.
5. Collectively, students make a list of the impacts such movements create on both the form and function of urban and rural environments.

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## Assessment & Evaluation of Student Achievement

- Students write a test to demonstrate their ability to distinguish between quantitative (amount, empirical data, distributions) and qualitative variables (values, beliefs, philosophies).
- Assess students' ability to effectively use technology for inquiry and presentation purposes (C).
- Use a checklist to assess essential graphing skills.

## Accommodations

- Provide a flexible timeline for completion of the spreadsheet.
- Provide opportunities to resubmit or improve upon map work if necessary.
- Arrange peer assistance for mapping and spreadsheet work.
- Students conduct the same study using GIS software, such as *ArcView 3.2*. Using up-to-date data, they edit ESRI or ArcCan attribute tables by creating new fields and shapefiles. They create a spatial gradient map of the percentage of land in agricultural use. Using up-to-date data, students create a chart that shows the rural/urban shift over time. They display the map and chart on the same layout.

## Resources

### Text

Baerwald, Thomas J. and Celeste Fraser. *World Geography: Building a Global Perspective*. Massachusetts: Prentice Hall, 2000.

Boehm, Richard G. *World Geography*. Toronto: McGraw-Hill Ryerson, 2000.

Chasmer, Ron and Pamela Perry-Globa. *Facing The Future*. Oxford University Press, 2000.

Corbin, Barry, John Trites, and Jim Taylor. *Global Connections: Geography for the 21st Century*. Oxford University Press, 2000.

Hannell, Christine and Stewart Dunlop. *Discovering the Human World*. Toronto: Oxford University Press, 2000.

### Websites

<http://www.bestpractices.org/>

<http://www.esricanada.com/k-12/>

<http://www.ifad.org/>

<http://www.unchs.org/>

<http://www.worldbank.org/research/projects/rural.htm>

### CD-ROMs

*ArcView 3.2*

## Activity 1.4: Urban Environments – Growth, Patterns, and Change

**Time:** 1.25 hours

### Description

Students determine the reason for urban growth in both developed and developing world countries. Students analyse the form of several global cities, determine the reasons for the settled patterns, and identify the factors that have contributed to the cities' growth. Students assess the spatial distribution of urban environments by applying the work of Von Thunen and the theories of Christaller to a settled landscape in an attempt to explain the patterns of human settlement on a landscape. Students complete this activity by identifying the internal patterns in a city, the reasons for change over time, and the reasons for differing patterns in developed and developing world countries.

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## Strand(s) & Learning Expectations

### Ontario Catholic School Graduate Expectations

CGE4b - demonstrates flexibility and adaptability.

**Strand(s):** Geographic Foundations: Space and Systems, Methods of Geographic Inquiry

### Overall Expectations

SSV.01 - analyse the characteristics of selected ecumenes (settled environments) and explain why they differ from place to place and from one period of time to another.

### Specific Expectations

SS1.02 - demonstrate an understanding of concepts of spatial interaction (e.g., intervening opportunities, complementarity, distance decay) and use them to explain patterns of movement and interactions between places (e.g., trade patterns, transportation patterns);

GI1.01 - explain how geographic knowledge and skills and geotechnologies can contribute to the resolution of major world social and economic problems;

GI2.02 - use sequences of maps, aerial photographs, and satellite images as a basis for describing, comparing, and analysing changes over time and for making predictions about trends and patterns in human geography.

### Prior Knowledge & Skills

- GIS skills, e.g., *ArcView 3.2*
- Grade 9 Geography – urban land use

### Planning Notes

- Assemble resources on the works of Von Thunen and Christaller.
- Book computers with access to GIS software, if available. **Note:** See Teaching/Learning Strategies for an alternative activity.
- Vocabulary required – basic and non-basic jobs, multiplier effect, colonization, decolonization, agricultural revolution, industrial revolution, central place theory, rank size rule, doubling rates, concentric zones, multiple nuclei, sector model, developing countries, developed countries, primate cities, binary cities
- Career profile to discuss – Urban Planner

### Teaching/Learning Strategies

1. The teacher begins by reviewing the reasons for rural-to-urban shift. The teacher identifies the differences between the process of development of urban environments in developed and developing countries of the world. The discussions focus on the agricultural and industrial revolution in the case of developed countries and, for developing countries, the role of colonization and decolonization.
2. Landscape Patterns – The teacher discusses with students the works of Von Thunen and Christaller. Students complete a GIS activity, similar to that described in *ArcView GIS Geography Student Workbook and Teacher's Guide* (see Resources), to prove the works valid. This GIS activity can be reconstructed for other regions of the world. Students also determine reasons for less-than-perfect correlation between modern-day urban centres and Christaller's theoretical pattern of development. If computers are not available, the requirements can be converted for a conventional map (see Resources – *Urban Dynamics*).
3. Students suggest reasons for a less-than-perfect fit in recent times, e.g., technological revolution in agriculture specialization, supermarkets, increased disposable incomes, personal mobility, communication technology, markets online. They discuss the differences between theory and reality.

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4. Students determine the difference between primate and binary cities. They apply the rank size rule to the cities of a country to show natural patterns of growth and placement. They calculate the doubling rate of selected cities and assess the impact of continued growth in different regions of the world.
  5. Internal Patterns – The teacher leads a discussion on land-use patterns in cities. The teacher and students create a land-use inventory, and use the local area as an example for discussion on locations of commercial, residential, and industrial activities. The teacher displays the concentric zone, sector, and multiple-nuclei models of urban land use. Students identify characteristics of each model and determine the factors that contributed to the shape of each model. Students predict future changes to the models.
  6. The teacher introduces students to the multiplier effect and the difference between basic and non-basic employment. Students complete a calculation, projecting the impact of the introduction of additional basic level jobs on both a community's employment level and population projections. Students repeat the calculation for a community that has lost a number of basic jobs.
  7. Based on their knowledge of urban patterns on a landscape and the internal patterns of an urban environment, students write a one-page report proving the thesis: *The urban environment is a dynamic system of intra- and inter-relationships largely driven by economic factors.* or *A combination of physical and human factors created the urban patterns in the Great Lakes megalopolis.*

### **Assessment & Evaluation of Student Achievement**

- Use a checklist for assessing students' essential map skills (A, C).
- Use a performance appraisal to assess GIS skills (K/U, A).
- Evaluate students' assessments of the less-than-perfect correlation between Central Place Theory and modern-day application (T/I).
- Evaluate students' reports for knowledge and application of concepts from this activity and previous lessons.

### **Accommodations**

- Provide a flexible timeline for completion of the assignment.
- Provide notes, outlines, critical information, and models before beginning the activity.

### **Enrichment Opportunity**

Students read case studies or view films to answer the following questions:

- Growth: Surpassing Optimum Limits – How Big Can A Settlement Be?
- Diminishing Returns: Decentralization – Has the Urban Experience Gone Sour?
- Building A New City In Modern Times – What are The Human and Environmental Costs?
- Changing Patterns: When City and Hinterland Meet – What are the Ramifications of Urban Sprawl?

### **Resources**

#### **Text**

Baerwald, Thomas J. and Celeste Fraser. *World Geography: Building a Global Perspective*. Massachusetts: Prentice Hall, 2000. (urban models)

Boehm, Richard G. *World Geography*. Toronto: McGraw-Hill Ryerson, 2000.

Cartwright, Fraser. *Urban Dynamics*. Toronto: Oxford University Press, 1991. (multiplier effect)

Chasmer, Ron and Pamela Perry-Globa. *Facing The Future*. Oxford University Press, 2000.

Corbin, Barry, John Trites, and Jim Taylor. *Global Connections: Geography for the 21st Century*. Oxford University Press, 2000.

Gilbert, Alan and Josef Gugler. *Cities, Poverty and Development: Urbanization in the Third World*, 2nd ed. Toronto: Oxford University Press, 1993.

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Hannell, Christine and Stewart Dunlop. *Discovering the Human World*. Toronto: Oxford University Press, 2000.

Taylor, Rex and Jon Nicolucci. *ArcView GIS Geography Student Workbook and Teacher Guide*. Crescent School/ESRI Canada.

### **Websites**

Official city sites, e.g., [www.mexicocity.com](http://www.mexicocity.com)

<http://www.unchs.org/guo/>

<http://www.worldbank.org/html/schools/issues/urban.htm>

## **Activity 1.5: Global Settlement Patterns – Density and Distribution (Lab Activity)**

**Time:** 2.5 hours

### **Description**

Students create a map using GIS to describe the global pattern of population distribution. They compare this distribution with thematic maps and draw conclusions. They use a spreadsheet to assess the relationship between population growth and quality of life by calculating the coefficient of correlation between two variables. They determine the strength of the relationship and suggest reasons for a less-than-perfect correlation.

### **Strand(s) & Learning Expectations**

#### **Ontario Catholic School Graduate Expectations**

CGE3b - create, adapt, and evaluate new ideas in light of the common good.

**Strand(s):** Human and Environment Interactions, Methods of Geographic Inquiry

#### **Overall Expectations**

GIV.01 - apply geographic skills, methods, and technologies to gather, analyse, synthesize, and communicate information on world geography.

#### **Specific Expectations**

HE2.05 - explain why various environments have differing capacities to support population growth and industrial development;

GI2.01 - analyse and synthesize information from remote sensing, geographic information systems, and maps and present conclusions;

GI2.03 - illustrate global human patterns, using a variety of thematic mapping techniques (e.g., proportional flow lines, choropleths);

GI2.04 - use statistical analysis techniques (e.g., correlational analysis) to analyse and interpret data.

### **Prior Knowledge & Skills**

- Thematic map interpretation
- GIS skills, e.g., *ArcView 3.2*
- Use of spreadsheets

### **Planning Notes**

- Book computers with access to GIS and spreadsheet programs, e.g., *Excel, Quattro Pro*.
- Prepare a lesson on quantitative methods, including coefficient of correlation.
- Create a rubric for assessment of the final product.
- Vocabulary required – population density, population distribution, coefficient of correlation
- Career profile to discuss – GIS Operator

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## Teaching/Learning Strategies

### Task

Determine the extent to which a country's population density determines quality of life.

Using a GIS, students prepare a population distribution map of the world and select quantifiable variables to layer on the map in order to determine if there is a correlation between a country's population density and quality of life (*ArcView 3.2* – use *Arc Canada 2.0*– *cntry. 95 shp*). Students calculate the coefficient of correlation between a country's population density and a quantifiable indicator of quality of life.

1. Students use *ArcView 3.2* to create a graduated colour map displaying the differences in global population density.
2. Students plot major urban centres on the same map, build a query to identify those that are in excess of ten million people, and create a new shape file.
3. Students activate the new file and describe the patterns that emerge. Students compare their map with the regional maps from Activity 1.1 (linguistic, religious, etc.). Students record their observations.
4. Students select indicators of quality of life from the variables found in the attribute table of *cntry.95.shp*. A full description of all attribute tables found in *ArcView 3.2* and *ArcCanada 2.0* can be found on the Esri Canada website. Students use the variables to show how population density and quality of life are related.
5. Students produce a layout of their map and create an original title that reflects this study.
6. The teacher directs a lesson in quantitative methods. Using a spreadsheet program, students calculate the coefficient of correlation between density and a variable that reflects quality of life, such as gross national product, life expectancy, death rates, birth rates, etc.
7. The teacher instructs students on how to interpret their answer. This exercise provides an opportunity to discuss the difference between a positive and negative correlation, as well as the use of numbers in supporting and developing an inquiry.
8. Students compare results and determine the pros and cons of each geographic technique.

### Assessment & Evaluation of Student Achievement

- Using one-on-one conferencing, assess students' evaluation of the pros and cons of the two geographic techniques for determining a correlation between variables in a critical analysis.
- Design a rubric or rating scale to evaluate students' ability to interpret the results of the correlation calculation.

### Accommodations

- Arrange peer assistance for mathematical procedures.
- Provide written instructions ahead of time.

### Enrichment Opportunity

Instead of producing a hard copy of the population density and distribution map, students turn in an electronic version with hot links for each of the cities over ten million. The links may contain pictures, data, or print material.

### Resources

**Text** (data sources and explanation of correlation techniques)

Baerwald, Thomas J. and Celeste Fraser. *World Geography: Building a Global Perspective*. Massachusetts: Prentice Hall, 2000.

Boehm, Richard G. *World Geography*. Toronto: McGraw-Hill Ryerson, 2000.

Chasmer, Ron and Pamela Perry-Globa. *Facing The Future*. Oxford University Press, 2000. Molyneux, John and Marilyn MacKenzie. *World Prospects: A Contemporary Study, 3rd ed.* Toronto: Prentice Hall, 1994. (explanation of quantitative techniques)

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## CD-ROMs

*ArcView 3.2, ArcCanada 1 and 2*

## Websites

<http://oagee.org/>

<http://www.uis.unesco.org/>

<http://www.un.org/>

## Activity 1.6: Changing Patterns – Meeting Human Needs

**Time:** 1.25 hours

### Description

Students read case studies and/or view films to create a comparative organizer of three major projects from the past that were created in response to both growth and changing human needs. Students select from water diversion, land conversion, land reclamation, housing, and network developments to complete their study.

### Strand(s) & Learning Expectations

#### Ontario Catholic School Graduate Expectations

CGE5e - respect the rights, responsibilities, and contributions of self and others.

**Strand(s):** Human and Environment Interactions, Methods of Geographic Inquiry

#### Specific Expectations

HE1.01 - identify examples from each continent of positive and negative effects of human activities on the natural environment;

HE2.01 - analyse the advantages and disadvantages of intensive human use of selected physical features (e.g., Yellow River valley);

GI2.07 - use written, oral, and visual communication skills to present the results of geographic inquiry and analysis effectively.

### Prior Knowledge & Skills

- conducting a cost/benefit analysis

### Planning Notes

- Prepare case studies.
- Choose projects for study and collect visuals and written materials for student assessment of impact.
- Vocabulary required – land conversion, reclamation, doubling rate, water diversion
- Career profile to discuss – Hydrologist

### Teaching/Learning Strategies

1. Students assess three human settlements that reflect the past of three different communities from three different continents.
2. Students record the collective demands of the region or community at the time and assess the scale and scope of the demands. They should note that, historically, human needs tended to reflect a society's limitations and collective desire to survive. Early to mid 20th-century communities tended to focus their efforts on infrastructure needs, networks, and economic endeavours in an attempt to meet the demands of the growing urban population and the demand for a better quality of life. Basic needs of the past are in many ways taken for granted today. Large-scale projects, although created with good intent, often present large-scale stress on the environment, e.g., land conversion and water diversion projects. Students may view a film at this point on such projects as the Aswan Dam in Egypt, the Narmada Project in India, the Panama Canal, the polders in the Netherlands, or the St. Lawrence Seaway.

- 
- Students create a comparative organizer of three major projects that were created in response to both population growth and changing human needs and determine the impact such projects have on settlement patterns.

### **Assessment & Evaluation of Student Achievement**

- Use anecdotal notes or self-assessment of the process used to compare the projects.
- Create a rubric or other assessment tool to evaluate the organizer for evidence of knowledge and inquiry.

### **Accommodations**

- Provide a word bank, with simplified definitions, for reading.

#### **Enrichment Opportunity**

If such a project were to take place in Canada today, who would you approach with your concerns? Students create a schematic diagram, tracing steps towards action.

### **Resources**

#### **Text**

Baerwald, Thomas J. and Celeste Fraser. *World Geography: Building a Global Perspective*. Massachusetts: Prentice Hall, 2000.

Boehm, Richard G. *World Geography*. Toronto: McGraw-Hill Ryerson, 2000.

Gilbert, Alan and Josef Gugler. *Cities, Poverty and Development: Urbanization in the Third World*, 2nd ed. Toronto: Oxford University Press, 1993.

Hannell, Christine and Stewart Dunlop. *Discovering the Human World*. Toronto: Oxford University Press, 2000.

Harshman, Robert and Christine Hannell. *The Human World: A Changing Place*. Toronto: John Wiley and Sons, 1985.

#### **Video**

<http://www.historychannel.com/index.html> (*The Big Dig* – city of Boston underground network.)

#### **Websites**

<http://econ.worldbank.org/>

<http://www.bigdig.com/>

## **Activity 1.7: The Physical Site – Forming Patterns**

**Time:** 1.75 hours

### **Description**

Using landform, climate, soil, and vegetation maps collected in Activity 1.1, students identify spatial patterns and correlations with global population distribution. Students identify cities of the world that have a distinctive form and determine if the form is the result of physical features. Students identify cities in landlocked countries and determine three consequences of the locations. Students reflect upon the implication of natural and political boundaries, the need for justice in the distribution of land, and the processing of subsequent resources.

### **Strand(s) & Learning Expectations**

#### **Ontario Catholic School Graduate Expectations**

CGE7i - respect the environment and uses resources wisely.

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**Strand(s):** Human and Environment Interactions, Methods of Geographic Inquiry,  
Understanding and Managing Change

**Specific Expectations**

HE1.03 - describe how landforms, climate, soils, and vegetation influence settlement patterns;

UC1.06 - explain the consequences of being a landlocked country (e.g., with respect to imports/exports, sharing of offshore resources) and describe how such a country responds to its position (e.g., Switzerland, Rwanda, Luxembourg);

GI2.01 - analyse and synthesize information from remote sensing, geographic information systems, and maps and present conclusions;

GI2.03 - illustrate global human patterns, using a variety of thematic mapping techniques (e.g., proportional flow lines, choropleths).

**Prior Knowledge & Skills**

- latitude and longitude
- geomorphology and climatology

**Planning Notes**

- Prepare a physical geography pre-assessment and provide a definition of region.
- Prepare instruction notes and visuals for review of landform, climate, vegetation, and soil regions of the world.
- Vocabulary required – landlocked, climate regions, soil regions, natural vegetation regions, landform regions
- Career profile to discuss – Geomorphologist

**Teaching/Learning Strategies**

1. Students begin by comparing their population distribution map, which they created in Activity 1.4, with global landform, climate, soils, and vegetation pattern maps collected in Activity 1.1. Students note both the distribution and density of populations in relation to mid, high, and low latitudes. They further their analysis by assessing the role of landforms, such as mountains, plains, lowlands, plateaus, and deserts, in attracting or deterring settlement. They record both the positive and negative aspects of these physical landscapes on settlements.
2. Students continue the analysis by comparing population density and global distribution with maritime and continental climates, soil regions, and vegetation types, such as grasslands, coniferous forests, deciduous forests, and tundra.
3. In the second part of the activity, students are presented with topographic maps of human settlements in order to study physical structure or morphology. An activity similar to the one found in *Urban Dynamics*, pp. 60-62, would work well. Students identify the general linear and circular patterns that tend to emerge when assessing urban form. The cities of Melbourne, Mexico City, Calcutta, Cairo, and Stockholm are good examples to use, for they are either circular or linear in form, and each reflect a physical feature in their shape. (See *Urban Dynamics*.)
4. To complete this study, students use GIS to create a map that identifies cities of the world that are located in countries that are landlocked. Students determine the consequences of such site locations in terms of economic development by creating a spatial gradient map of GNP and layering it onto the landlocked countries. They use the calculator function in *ArcView 3.2* to determine the average GNP for the world and build a query that identifies landlocked countries below the global average. They assess the pattern, identify anomalies, and describe the strength of the correlation.

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## Assessment & Evaluation of Student Achievement

- Assess students' map for clarity and the effectiveness of the legend in displaying the query (K/U).
- Monitor the group discussion for assessment of students' ability to critically analyse the economic, defensive, and developmental implications of being landlocked (T/I).

## Accommodations

- Arrange for peer assistance with the GIS activity.
- Accompany regional maps with critical information notes and highlight important vocabulary.
- Include written and verbal instructions.

## Enrichment Opportunity

Using latitude and longitude, the teacher selects four coordinates somewhere on earth. Students locate the area and determine the benefits and limitations of the physical site to support an ecumene.

## Resources

### Text

Baerwald, Thomas J. and Celeste Fraser. *World Geography: Building a Global Perspective*. Massachusetts: Prentice Hall, 2000.

Boehm, Richard G. *World Geography*. Toronto: McGraw-Hill Ryerson, 2000.

Cartwright, Fraser. *Urban Dynamics*. Toronto: Oxford University Press

Knox, Paul L. *Places and Regions in a Global Contest: Human Geography*. Prentice Hall, 2001.

Peterson, Dean R., Delores F. Wundor, and Harlan L. Mueller. *Social Problems: Globalization in the 21st Century*. Prentice Hall, 1999.

Rowtree, Lester, Marti Lewis, Marie Price, and William Whchoff. *Diversity Amid Globalization*. Prentice Hall, 2000.

Rubenstein, James M. *The Cultural Landscape: An Introduction to Human Geography, 2nd ed.* Prentice Hall, (spring 2002).

### Websites

<http://www.nationalgeographic.com/xpeditions/lessons/index.html>

<http://www.ulcc.ac.uk/unesco/terms/list82.htm> - UNESCO - Thesaurus - search for topics dealing with land settlement issues

<http://www.un.org/esa/subindex/gb15.htm>

## Activity 1.8: Defining Regions and Creating Boundaries

**Time:** 1.75 hours

### Description

Students differentiate between actual and perceived boundaries. They use a political and physical map of the world to identify boundaries that have been influenced by natural phenomena and those that are the result of human decisions. From the list, they determine if the boundary was primarily influenced by geography, culture, religion, language, ethnicity, economics, or political ideology. During this activity, students are expected to reflect upon the diversity and interdependence of the world's peoples, respect and understand their history, and recognize the role of cultural divergence and convergence in the formation of boundaries.

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## Strand(s) & Learning Expectations

### Ontario Catholic School Graduate Expectations

CGE5e - respect the rights, responsibilities, and contributions of self and others.

**Strand(s):** Geographic Foundations: Space and Systems, Methods of Geographic Inquiry

### Specific Expectations

SS1.03 - identify boundaries according to type (e.g., natural, artificial, antecedent, subsequent);

SS2.02 - explain how and why national and regional boundaries evolve;

GI2.01 - analyse and synthesize information from remote sensing, geographic information systems, and maps and present conclusions;

GI2.05 - choose the most appropriate methods for forecasting, problem solving, and decision making to support their independent study.

### Prior Knowledge & Skills

- Grade 10 History – Cold War
- thematic maps collected in Activity 1.1

### Planning Notes

- Students require political and thematic maps.
- Prepare handouts and a lecture on the Cold War (show film).
- Access *ArcView 3.2* and *ArcCanada 2.0* files.
- Vocabulary required – boundary, political ideology, cultural divergence, cultural convergence
- Career profile to discuss – Cultural Geographer

### Teaching/Learning Strategies

1. The teacher discusses with students the difference between actual and perceived boundaries. Together, students and the teacher create a definition for both natural and physical boundaries.
2. With the use of both political and physical landscape maps of the world, students identify boundaries that appear to have been influenced by natural phenomena. The meandering erratic shape of the boundary line often indicates a decision that resulted from a response to physical features as opposed to a straight line that is more indicative of a political decision.
3. In Teaching/Learning Strategies related to political geographic boundaries, teachers must be sensitive to the national origins of students. Collectively, students create two lists: boundaries that appear to be the result of physical phenomena and boundaries that appear to be affected by political decisions.

Student answers may include:

- 49th parallel separating Canada and the USA;
- the division between Israel and Palestine;
- the division between Mexico and the USA;
- Alaska and the Yukon Territory;
- Haiti and the Dominican Republic;
- Brazil and the nine countries that border it;
- the boundaries of Germany;
- the division between North and South Korea;
- China and Mongolia;
- India and Pakistan;
- Papua New Guinea and Indonesia;
- North and South Korea.

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4. The teacher delivers a mini-lesson on the Cold War. During the Cold War, the term Iron Curtain was used to define the boundaries between two political philosophies. The two world super powers of the time, the USA and the USSR, created buffer zones around themselves and countries with similar philosophies. The teacher directs students to a modern-day example and determines if the perceived boundary is a result of cultural, economic, or religious actions.
  5. Students are randomly assigned a boundary from the prepared list. They determine if political, economic, social, religious, or ethnic variables played a role in creating the boundary. Students share their findings in small groups.

### **Assessment & Evaluation of Student Achievement**

- Assess students' skills in the group sharing session for their ability to debate, defend a position, articulate effectively, cooperate, be a reflective listener, and be supportive of others (C).
- Assess students' reflective journals used to record success and improvements required in group dynamics.
- Evaluate students' maps for essentials and accuracy.

### **Accommodations**

- Arrange peer assistance with GIS work.
- Allow students to re submit work.

### **Enrichment Opportunity**

Boundaries are relatively static, however, when two nations are at odds over the placement of the boundary tensions can run high and eventually lead to conflict. In some cases, the boundary may be disputed, in others, recreated, or simply eradicated. As part of an enrichment opportunity, students research the creation of, and present dispute over, a modern-day boundary, such as the one found between:

- Indonesia and East Timor;
- Pakistan, Kashmir, and India.

### **Resources**

#### **Text**

Baerwald, Thomas J. and Celeste Fraser. *World Geography: Building a Global Perspective*. Massachusetts: Prentice Hall, 2000.

Boehm, Richard G. *World Geography*. Toronto: McGraw-Hill Ryerson, 2000.

Chasmer, Ron and Pamela Perry-Globa. *Facing The Future*. Oxford University Press, 2000.

Corbin, Barry, John Trites, and Jim Taylor. *Global Connections: Geography for the 21st Century*. Oxford University Press, 2000.

Crewe, James R., Barry Corbin, Malcolm Squires, and John Trites. *World Geography*. Oxford University Press, 2000.

#### **Websites**

<http://www.nationalgeographic.com/xpeditions/lessons/index.html>

<http://www.ulcc.ac.uk/unesco/terms/list82.htm> - UNESCO - Thesaurus - search for topics dealing with land settlement issues

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## Activity 1.9: Natural Resources and Settlement Patterns

**Time:** 1.25 hours

### Description

Students compare global settlement patterns to the global distribution of metallic minerals, mineral fuels, and non-mineral resources to determine the relationship with respect to social/economic problems or success. They read a case study of a community dependent on a single natural resource for survival and assess the impact on form and function. Students report their findings in essay form. Students reflect upon the need for collective stewardship, conservation, and willingness to share wealth.

### Strand(s) & Learning Expectations

#### Ontario Catholic School Graduate Expectations

CGE7i - respect the environment and use resources wisely.

**Strand(s):** Human-Environment Interactions, Global Connections, Methods of Geographic Inquiry

#### Specific Expectations

GC3.05 - conduct a case study of a country that depends on a single resource (e.g., oil in Nigeria or a Middle Eastern country) to illustrate the positive and negative impacts of this type of economy on cultural, political, and social life;

GI2.01 - analyse and synthesize information from remote sensing, geographic information systems, and maps and present conclusions;

GI2.07 - use written, oral, and visual communication skills to present the results of geographic inquiry and analysis effectively;

HE2.05 - explain why various environments have differing capacities to support population growth and industrial development;

HE2.01 - analyse the advantages and disadvantages of intensive human use of selected physical features (e.g., Yellow River valley);

HE1.03 - describe how landforms, climate, soils, and vegetation influence settlement patterns;

HE1.01 - identify examples from each continent of positive and negative effects of human activities on the natural environment.

### Prior Knowledge & Skills

- GIS and inquiry skills
- knowledge of natural resources, including type and value
- basic mathematics, including the calculation of multiplier effect

### Planning Notes

- Create examples for the application of multiplier effect.
- Acquire a case study of a single-industry community.
- Differentiate between social and economic factors.
- Vocabulary required – resource, reserve, multiplier effect, basic employment, non-basic employment
- Career profile to discuss – Mineralogist

### Teaching/Learning Strategies

1. Using GIS, students compare the distribution of global populations with the distribution of metallic minerals, non-metallic minerals, and mineral fuels.
2. Students describe the pattern and determine the relationship between resources and human settlement on earth by comparing resource location and ecumene development.

- 
3. Students read a case study of a single-industry community that is dependent on natural resources for employment, e.g., oil in Nigeria. They identify the social and economic problems such settlements face when the resource depended upon is exhausted or in less demand.
  4. Students complete this activity by defining the multiplier effect and applying it to a fictional situation. Students differentiate between basic and non-basic jobs. They calculate the number of new jobs created when a new industry comes to a community and identify the spin-off benefits from such a situation. Students also calculate the expected increases in population and determine the impact on the settlement. The same equation can be used to show the impact on a community when basic level jobs are lost. Students report their findings in writing.

### **Assessment & Evaluation of Student Achievement**

- Use a rubric to evaluate the calculations and impact statements of population loss and gain (K/U, A).
- Assess students' GIS maps for accuracy and essentials using a checklist.

### **Accommodations**

- Arrange peer assistance with calculations and GIS mapping.
- Provide verbal and written instructions for the task.

### **Enrichment Opportunity**

Students locate the settlement used in the case study, evaluate the site and situation, and prepare a report on the potential for future economic diversification.

### **Resources**

#### **Text**

Baerwald, Thomas J. and Celeste Fraser. *World Geography: Building a Global Perspective*. Massachusetts: Prentice Hall, 2000.

Boehm, Richard G. *World Geography*. Toronto: McGraw-Hill Ryerson, 2000.

Cartwright, Fraser. *Urban Dynamics*. Toronto: Oxford University Press.

Chasmer, Ron and Pamela Perry-Globa. *Facing The Future*. Oxford University Press, 2000.

Corbin, Barry, John Trites, and Jim Taylor. *Global Connections: Geography for the 21st Century*. Oxford University Press, 2000.

#### **Websites**

<http://econ.worldbank.org/>

<http://www.nationalgeographic.com/xpeditions/lessons/index.html>

<http://www.un.org/>

## **Activity 1.10: Dealing With Extremes – The Effects of Natural Disasters on Settlement Patterns**

**Time:** 1.25 hours

### **Description**

Some settled areas are under the constant threat of volcanic activity. Students explore the impact volcanoes will have on settled areas by watching a video and question how the settlements have been altered by an eruption. Students recognize that life is a gift and that a person entrusted with life does not own it but that one is called to protect and cherish it and assist others in need. This visual activity encourages students to compare variations in disasters as they relate to the type of settlement (rural/urban), plus the socio/economic and/or physical dynamics of the area.

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## **Strand(s) & Learning Expectations**

**Strand(s):** Geographic Foundations: Space and Systems, Human-Environment Interaction

### **Overall Expectations**

HEV.04 - explain how the natural environment and natural phenomena affect human activities;  
SSV.02 - demonstrate an understanding of basic concepts of spatial interaction and analyse the impact of spatial factors on human systems.

### **Specific Expectations**

HE3.04 - explain how natural hazards (e.g., drought, flooding, typhoons, landslides, earthquakes) and environmental problems caused by human activities (e.g., oil spills, acid rain) affect development in selected regions.

### **Prior Knowledge & Skills**

- plate tectonics
- ring of fire
- types of volcanoes

### **Planning Notes**

- Acquire a video on volcanic activity. The video must depict several areas of the world and how they were impacted by volcanoes.
- Prepare list of concepts for students to recognize in the video, if necessary.
- Some students may be familiar with the destructive power of volcanoes but this activity allows students to assess the effect a volcano has on the settlement.
- Vocabulary required – natural disaster, natural event, volcano, lava, magma, pyroclastic flow
- Career profile to discuss – Volcanologist

### **Teaching/Learning Strategies**

1. The teacher conducts an initial discussion with students regarding their knowledge of recent volcanic activity to reveal that people and their way of life are altered by this and other natural disasters.
2. Using maps of the world, the class identifies the areas of the world most affected by volcanoes, making reference to the ring of fire, Mt. Etna, etc.
3. Students view the video and create notes that describe how the disaster affects the settlement.
4. The teacher and students discuss the ways in which the settlement has been altered and suggest options for the future of the affected area.

### **Assessment & Evaluation of Student Achievement**

- Perform an informal assessment of students' note taking during the video.
- Assess students' ability to apply their notes to conclusions about settlements and disasters (A, C).

### **Accommodations**

- Provide an alternative activity for students who are visually impaired.
- Provide oral pre planning of video content for the learning disabled, where required.

### **Enrichment Opportunity**

Students research famous explosions that have destroyed settlements. In some cases these have never been built again; in others the nutrient rich ash has been used as a starting point for new and productive agriculture.

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## Resources

### Text

Chasmer. *Earth Dynamics*. Oxford University Press, 1995.

Geography Lab Inc. – a division of Johnson Publications Ltd. *The Physical Geography Series*, PHY – 03 “Volcanoes.”

### Video

NFB. *The Evolving Earth Series – Volcano*.

Nova – “*Deadly Shadow of Vesuvius*”. PBS.

### Websites

USGS- <http://volcanoes.usgs.gov/> - global volcano activity

## Activity 1.11: Human Activities - Influencing Settlement Patterns

**Time:** 2.0 hours

### Description

Students conduct a comparative study of the Yanomami of the Amazon and the city dwellers of Northern Brazil and Southern Venezuela - human settlements that are both a product of human culture and human function yet worlds apart in technological development. Students individually assess the impact the two societies have on their environment as well as the impact they have on each other. Students debate the future of the two types of settlements and rate their ability to meet the needs of their human societies. Students evaluate this situation in light of social justice and their role in defending the oppressed.

### Strand(s) & Learning Expectations

#### Ontario Catholic School Graduate Expectations

CGE4c - take initiative and demonstrates Christian leadership;

CGE5a - work effectively as an interdependent team member.

**Strand(s):** Geographic Foundations: Space and Systems, Methods of Geographic Inquiry, Global Connections

#### Overall Expectations

SSV.01 - analyse the characteristics of selected ecumenes (settled environments) and explain why they differ from place to place and from one period of time to another;

GCV.01 - analyse the impact of culture on settlement patterns and human activities.

#### Specific Expectations

SS2.01 - explain why groups of people in similar environments (e.g., deserts) may have different ways of life;

SS1.04 - explain how culture (e.g., religion, gender roles, social values, food preferences) and function (e.g., finance, trade, government, education, manufacturing) affect the characteristics of a place;

GI3.01 - evaluate the positions of different groups on selected issues related to human geography;

GC3.01 - analyse selected settlement patterns around the world to show how they have been influenced by cultural factors (e.g., inheritance systems, land settlement systems).

### Prior Knowledge & Skills

- distinguishing characteristics between rural and urban settlements
- the role of culture in developing settlements

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## Planning Notes

- Acquire a film of Yanomami, depicting their way of life and the issues they faced.
- Vocabulary required– cultural assimilation, cultural preservation
- Career profile to discuss – Cultural Anthropologist

## Teaching/Learning Strategies

1. The teacher begins by describing the task and reviewing with students the methods and conventions of conducting a debate.
2. The world of the Yanomami predates recorded history; however, similar to the modern-day city dwellers of Brazil and Venezuela, they developed their settlements within natural parameters to meet human needs. The societies religious, social, and economic factors affect the societies patterns of settlement. This study also introduces students to the elements of cultural diffusion and assimilation.
3. Students individually assess the impact the two societies have on their environment as well as the impact they have on each other.
4. Students debate the abilities of the two types of settlements to meet the future needs of their societies.

## Assessment & Evaluation of Student Achievement

- Use a rubric to assess students' ability to discuss/debate the issue, defend arguments, present accurate/relevant support for their position, and respect the opinions of others.

## Accommodations

- Assist students with film note making by providing guided questions.

Enrichment Opportunity

Students create proposals for the preservation of aboriginal lands in the Amazon.

## Resources

### Text

Hannell, Christine and Stewart Dunlop. *Discovering the Human World*. Toronto: Oxford University Press, 2000.

Kernahan, Deo, Peter Lawley, James Ellsworth, Sharon Goodland, Sean Dolan, Mark Flumerfelt, Donald Quinlan, and Dennis Des Rivieres. *Exploring World Religions: The Canadian Perspective*. Oxford University Press, 2000.

Knox, Paul L. *Places and Regions in a Global Contest: Human Geography*. Prentice Hall, 2001.

Peters, John F. *Life Among the Yanomami*. Broadview Press, 1998 (several books have been written on the life and struggles of the Yanomami).

Peterson, Dean R., Delores F. Wundor, and Harlan L. Mueller. *Social Problems: Globalization in the 21st Century*. Prentice Hall, 1999.

Rowtree, Lester, Marti Lewis, Marie Price, and William Whchoff. *Diversity Amid Globalization*. Prentice Hall, 2000.

Rubenstein, James M. *The Cultural Landscape: An Introduction to Human Geography, 2nd ed.* Prentice Hall, (spring 2002).

### Video

Several films have been produced – check local libraries for visual resources

<http://www.videoproject.org/yanomami.html> - site to order film

<http://www.pbs.org/wgbh/nova/teachers/resbytitle.html> - Warriors of The Amazon – Nova. Print version and teachers' resources available online.

### Websites

Cultural Survival - <http://www.cs.org/>

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## **Activity 1.12: Human Activities that Affect the Site and Development of a Settlement**

**Time:** 3.75 hours

### **Description**

Students create a case study of a present-day settlement in which humans have dramatically altered the physical site to meet their needs. Students critically analyse the alterations, conduct a cost/benefit analysis, and suggest an alternative to the action. Students employ both quantitative methodologies and geotechnologies introduced in this unit to identify the positive and negative effects of these adaptations. Students present their efforts electronically, demonstrating both their analytical abilities and technological competence.

### **Strand(s) & Learning Expectations**

#### **Ontario Catholic School Graduate Expectations**

CGE4e - set appropriate goals and priorities in school, work, and personal life.

**Strand(s):** Geographic Foundations: Space and Systems, Methods of Geographic Inquiry, Understanding and Managing Change, Global Connections

#### **Overall Expectations**

GIV.02 - conduct an independent inquiry that applies geographic knowledge, skills, and methods effectively to a study of places and human patterns.

#### **Specific Expectations**

GC2.04 - assess the impact of technological change in a region of the world;

HE1.01 - identify examples from each continent of positive and negative effects of human activities on the natural environment;

HE1.02 - describe selected examples of distinctive alterations of the physical environment by humans (e.g., terraced hillsides of Thailand, polders in the Netherlands) and explain the reasons for these adaptations;

GI2.01 - analyse and synthesize information from remote sensing, geographic information systems, and maps and present conclusions;

GI2.05 - choose the most appropriate methods for forecasting, problem solving, and decision making to support their independent study;

GI2.07 - use written, oral, and visual communication skills to present the results of geographic inquiry and analysis effectively;

GI3.02 - conduct an independent inquiry on a political, economic, cultural, or social issue related to a region or nation in Africa, Asia, or Oceania, using key concepts and methods presented in the course;

GC3.01 - analyse selected settlement patterns around the world to show how they have been influenced by cultural factors (e.g., inheritance systems, land settlement systems).

### **Prior Knowledge & Skills**

- components of a case study;
- human and physical geographic vocabulary.

### **Planning Notes**

- Prepare a clear concise task, based on specific and overall expectations.
- Book computers and the library/resource centre.
- Prepare a conferencing schedule.
- This culminating activity builds on the process used in Activity 1.6.
- Vocabulary – students create vocabulary of geographic terms specific to their inquiry
- Career profile to discuss – Environmental Geographer

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## Teaching/Learning Strategies

1. The teacher reviews the content and skills from previous activities in Unit 1.
2. The teacher presents the task, clearly identifies the expectations, and distributes the evaluation rubric.
3. With approximately three hours to complete this task, students establish a timeline for selecting a topic, collecting data and print materials, and creating the finished product.

### Task

Students research, analyse, and draw conclusions regarding the costs and benefits of a present-day “mega project” that has been designed to meet human needs.

### Requirements

The case study must include:

- the background reasons for the project (economic, physical, human);
- an environmental impact assessment (flora, fauna, atmosphere, land, water);
- a human impact assessment (culture, migration, density, distribution, dislocation);
- a cost/benefit analysis;
- a critical analysis of the results of the study and an informed decision on the project’s ability to meet human needs;
- an alternative plan of action to soften the human and physical impact of the project;
- the use of geotechnologies and quantitative methods.

### Possible Topics

- Hibernia, North Sea Oil Project, Three Gorges Project in China, the “Chunnel”, The “Big Dig” in Boston

## Assessment & Evaluation of Student Achievement

- Assess the process students use to complete this activity.
- Use a rubric (see Appendix 2) to evaluate the final product for students’ ability to:
  1. develop an inquiry of their own design with the parameters of the assignment;
  2. apply their knowledge of quantitative and geotechnical skills to their inquiry of a new situation;
  3. communicate effectively and present their findings in a prescribed format;
  4. demonstrate an understanding of their topic.

## Accommodations

- Provide guidance and steps to be followed in the inquiry process.
- Conference with students on a daily basis.
- Assist students in setting short-term goals.
- Arrange peer assistance with readings.
- Provide appropriate readings for ESL students.

### Enrichment Opportunity

Students create a class Human Geography Web Page with links to resources to support this study. Post examples of good work for students in upcoming years. Compare the results of this case study with the observations made in Activity 1.6.

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## Resources

### Print

Baerwald, Thomas J. and Celeste Fraser. *World Geography: Building a Global Perspective*. Massachusetts: Prentice Hall, 2000.

Boehm, Richard G. *World Geography*. Toronto: McGraw-Hill Ryerson, 2000.

Chasmer, Ron and Pamela Perry-Globa. *Facing The Future*. Oxford University Press, 2000.

Corbin, Barry, John Trites, and Jim Taylor. *Global Connections: Geography for the 21st Century*. Oxford University Press, 2000.

Crewe, James R., Barry Corbin, Malcolm Squires, and John Trites. *World Geography*. Oxford University Press, 2000.

Dunlop, Stewart and Michael Jackson. *Understanding Our Environment*. Oxford University Press, 2000.

Hannell, Christine and Stewart Dunlop. *Discovering the Human World*. Toronto: Oxford University Press, 2000.

Kernahan, Deo, Peter Lawley, James Ellsworth, Sharon Goodland, Sean Dolan, Mark Flumerfelt, Donald Quinlan, and Dennis Des Rivieres. *Exploring World Religions: The Canadian Perspective*. Oxford University Press, 2000.

Knox, Paul L. *Places and Regions in a Global Contest: Human Geography*. Prentice Hall, 2001.

Rowtree, Lester, Marti Lewis, Marie Price, and William Whchoff. *Diversity Amid Globalization*. Prentice Hall, 2000.

Rubenstein, James M. *The Cultural Landscape: An Introduction to Human Geography, 2nd ed.* Prentice Hall, (spring 2002).

### Websites

<http://www.un.org/>

<http://www.uis.unesco.org/>

## Appendix 1

### Activity 1.1: Human Geography – The Tools, the Methods, and the Study

World Maps	Data	Analytical Techniques
Physical	Population	Coefficient of Correlation
Political	Density	Variation
Religions	GNP	Divided Circles
Language Families	GDP	Graded Shading
Resources	Education	Index Numbers
Fuel Deposits	Land Area	Log Scales
Climate	Medical Care	Lorenz Curves
Soil	Energy Consumption	Proportional Circles
Vegetation	Energy Production	Rates of Change
Economic Activity	Government	Relative Percentage
Mountains	Resources	Trend Lines
Cities	Communications	Linear Graph
Precipitation	Life Expectancy	Bar Graph
Transportation	Death Rate	Scatter Graph
Rivers	Birth Rate	Logarithmic Graph
Lakes	Annual Growth	Triangular Graph
Metallic Minerals	Projected Population	Population Pyramid
Relief	Infant Mortality	<b>GIS – Inquiry Skills</b> <i>ArcView 3.2</i>
Ocean Floor	Demographic	
Currents	Urban Population	• Create a View
Pressure and Winds	Rural Population	• Access Files
Deserts	Migration	• Add Fields
Peninsulas	Male Literacy	• Use Legend Editor
Latitude / Longitude	Female Literacy	• Open Attributes
Time Zones	Military Expenditures	• Build Queries
Population Distribution	Remaining Wilderness	• Create Shape File
Government	Food Availability	• Edit Tables
Agricultural Lands	Air Quality	• Input Data
Atmospheric Pollutants	Water Quality	• Merge Tables
Plate Boundaries	Industrial Development	• Calculate
Earthquakes	Temperature	• Hot Link
Volcanoes	Precipitation	• Buffering
Population Change	Distribution of Wealth	• Create Layout
Indigenous Peoples	Employment	• Edit Layout
Alliances	Ethnicity	• Create Charts

Collection/Location of Materials Complete \_\_\_\_\_ (date)

Place Names - Countries of the World Review Complete \_\_\_\_\_ (date)

GIS Inquiry Skills Review Complete \_\_\_\_\_ (date)

## Appendix 2

### Assessment & Evaluation of Student Achievement – Activity 1.12

#### Task Rubric – Human Activities that Affect the Site and Development of a Settlement

Selected Site:

Human Activity:

Criteria/ Expectations	Level 1 (50-59%)	Level 2 (60-69%)	Level 3 (70-79%)	Level 4 (80-100%)
<b>Knowledge/ Understanding</b> Demonstrates an understanding of the impact of human activity on a selected site HE1.02	- demonstrates limited knowledge of facts and terms	- demonstrates some knowledge of facts and terms	- demonstrates considerable knowledge of facts and terms	- demonstrates a high degree of knowledge of facts and terms
<b>Thinking/Inquiry</b> Applies inquiry skills to formulate study of selected site and produce a case study GIV.02, GI2.01  Critically assesses the significance of the site alteration GC2.04, GC3.01	- applies few of the skills involved in an inquiry process  - uses critical-thinking skills with limited clarity and effectiveness	- applies some of the skills involved in an inquiry process  - uses critical-thinking skills with some clarity and effectiveness	- applies most of the skills involved in an inquiry process  - uses critical-thinking skills with considerable clarity and effectiveness	- applies all or almost all of the skills involved in an inquiry process  - uses critical-thinking skills with a high degree of clarity and effectiveness
<b>Communication</b> Makes use of technology to communicate findings GI2.07 Reports in writing the impact of human activities on the form and development of the community GI2.07	- uses technology with limited effectiveness  - communicates in writing with limited effectiveness	- uses technology with some effectiveness  - communicates in writing with some effectiveness	- uses technology with considerable effectiveness  - communicates in writing with considerable effectiveness	- uses technology with a high degree of effectiveness  - communicates in writing with a high degree of effectiveness
<b>Application</b> Applies concepts and knowledge of physical and human geography GI2.05	- applies concepts and knowledge with limited effectiveness	- applies concepts and knowledge with some effectiveness	- applies concepts and knowledge with considerable effectiveness	- applies concepts and knowledge with a high degree of effectiveness

**Note:** A student whose achievement is below Level 1 (50%) has not met the expectations for this assignment or activity.