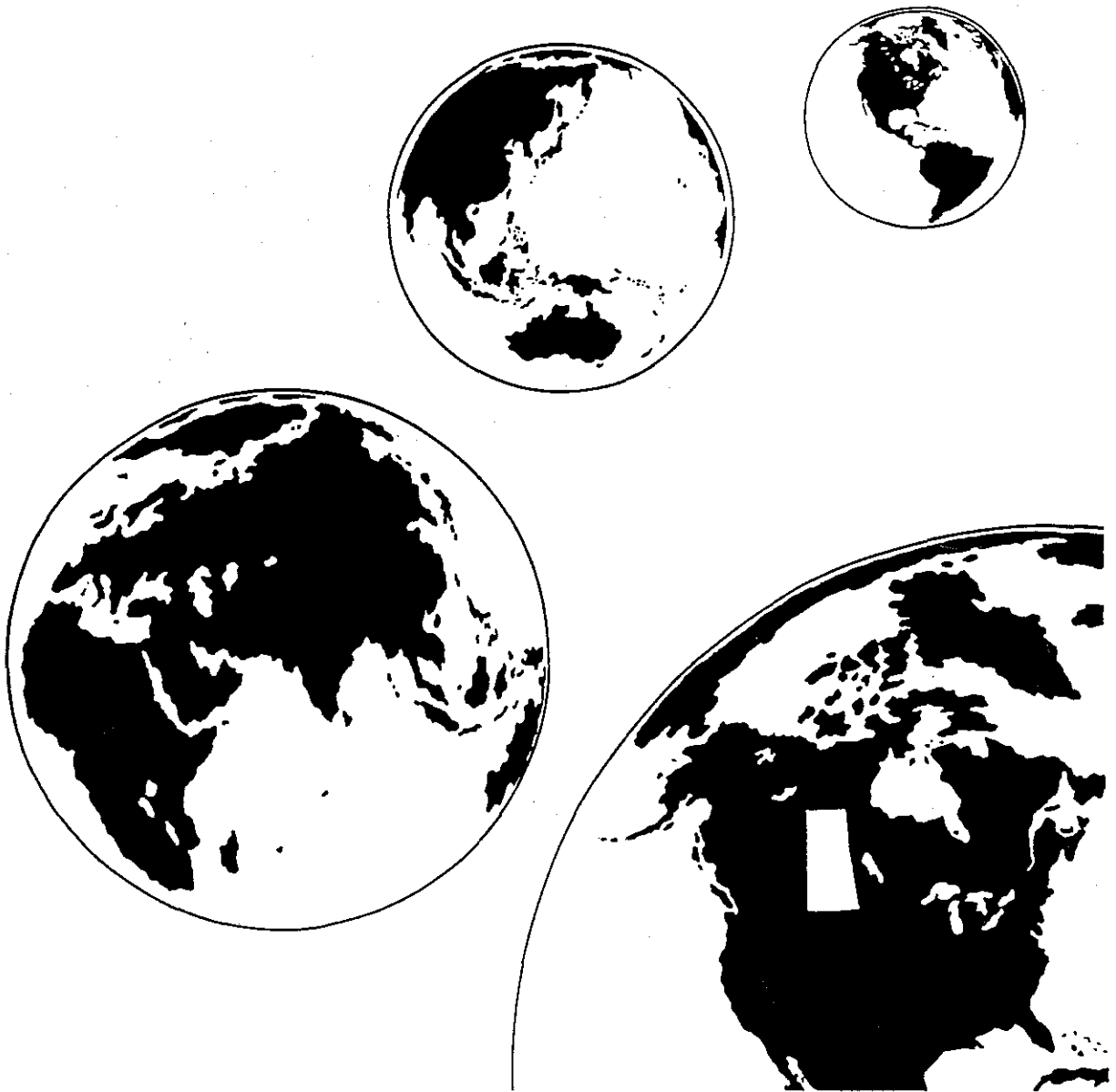




Saskatchewan
Education

Geography

Program of Studies for the High School - Grade XI



Recycled Paper

July 1966

FOREWORD

This curriculum guide for grade XI geography was developed by the Provincial Geography Committee set up in 1963 to prepare a geography course for grade X. The Committee is representative of the Saskatchewan Teachers' Federation, the University of Saskatchewan (College of Education and the Geography Department), the Saskatchewan School Superintendents' Association, and the Department of Education. The co-operation of school boards in releasing teachers from regular duties to participate in Committee meetings is gratefully acknowledged.

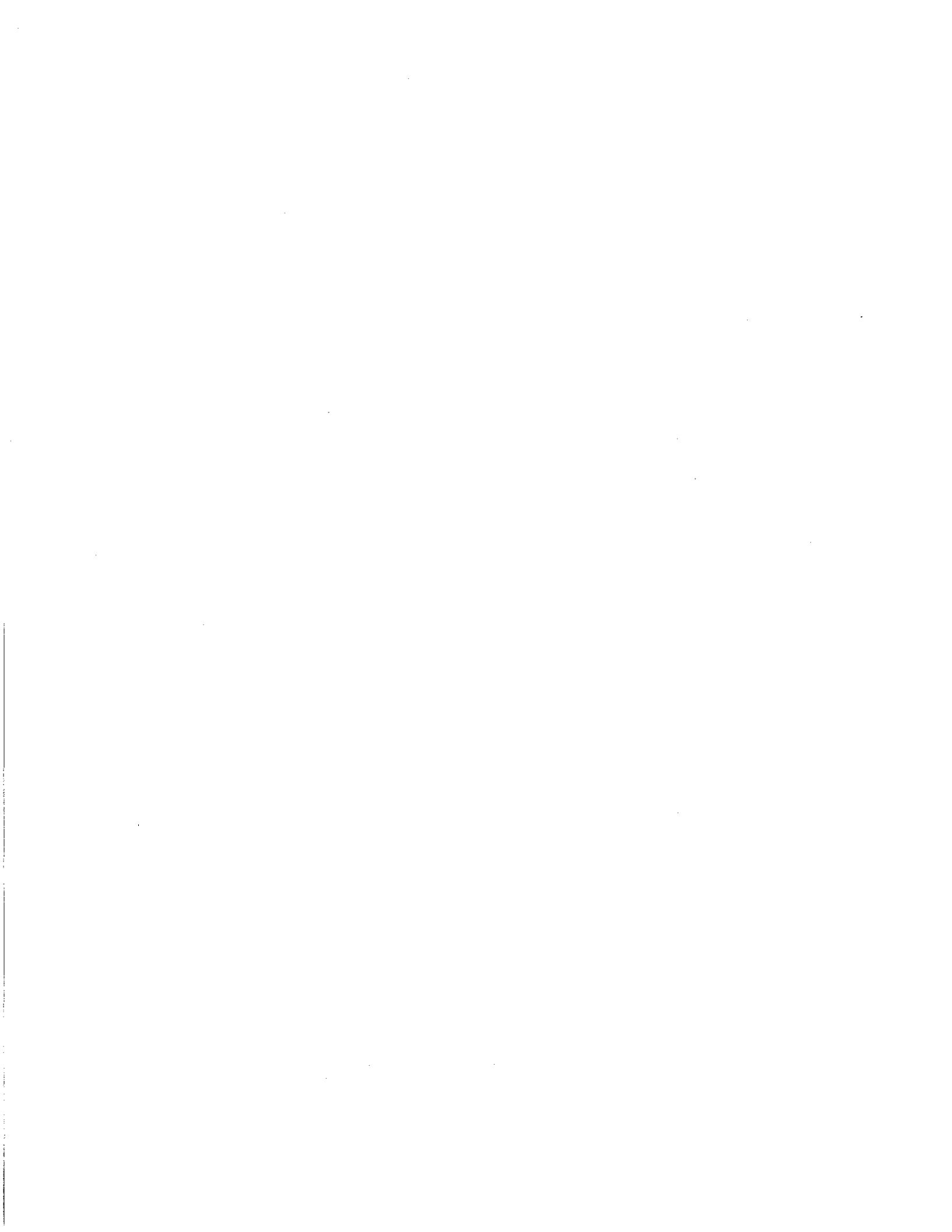
The present grade XI course outline is the result of a feeling that students who had taken the grade X geography course should have an opportunity to continue their study of the subject in grade XI, and that geography was a subject worthy of study in each of the years of Division IV. It is being offered as an optional subject in grade XI.

The curriculum guide has been prepared in a mimeographed interim edition, to be used in classrooms and evaluated before the outline is finalized. Unlike the grade X guide, the present outline does not include suggested student activities. It was the opinion of the Committee that the inclusion of Assignments at intervals in each chapter of the textbook provided more than sufficient suggestions and guidance to student thinking and activity. It is expected that teachers will encourage students to make extensive use of these aids to learning.

The textbook contains an abundance of interesting materials well organized and easy to read. The student can learn a great deal simply by reading the textbook, therefore, it should not be necessary for the teacher to go over all the content in detail, but rather to guide student reading, and concentrate on developing the understanding of basic concepts.

In addition to the basic text, the Committee has recommended student and teacher references, and other instructional aids such as maps. This is, of course, a minimum list. Further suggestions will be made later through the Circular Relative to Textbooks and in the Curriculum Newsletter.

The Committee would welcome suggestions and comments on the course outline. Members of the Committee are prepared to assist groups of teachers who wish to make a study of the grade XI course. Requests for such assistance should be made to the Curriculum Branch, Department of Education, Regina, Saskatchewan.



INTRODUCTORY STATEMENT

An adaptation of a statement prepared for the British Columbia Department of Education Geography Advisory Committee by faculty members of the University of British Columbia Department of Geography.

Geography has been defined as that field of learning in which the characteristics of particular places on the earth's surface are examined. It is concerned with the characteristics of places and regions particularly as to:

- (a) their location in relation to other places;
- (b) variable phenomena, both natural and cultural (physical and human), which distinguish one place from another;
- (c) interaction between places.

Regional geography is the study of the distinctive areas of the earth. A region may be defined as an area of any size throughout which there is some degree of uniformity in terms of the criteria by which it is defined. The region may be as small as a farm or city block or as large as a continent; it may be a region defined by political boundaries, high mountains, or climatic differences. Regional geography studies areas, seeking to discover and analyze particular patterns of phenomena such as landforms, settlement, or crops.

Geography has always dealt with the physical earth, but modern geographers believe that the significance of the elements of the physical world is a function of the attitudes, objectives, and technical abilities of man himself. Man's interest in and study of the differences which exist from place to place on the earth are related to man's search for knowledge about himself. Put in a simple way, geographical study of the earth and its places becomes interesting and meaningful if it is helping to answer the question, "Why do people do what they do where they do it?"

OBJECTIVES

The intent of this course in geography is to acquaint and explain to the student the basic distributions of physical and cultural phenomena over the earth's surface. Through analysis of these distributions, and some of the societal processes, an understanding of the environment, society and economy of the

different regions of the world should be achieved. Further, the study of geography should lead to an appreciation of the fact that the world is one, that no region exists in isolation, that, today, all parts of the world are interdependent.

To ensure the attainment of the above, the geography program should foster in the student the development of the following understandings, skills, and attitudes:

1. Understandings

- (a) There is no split between "physical geography" and "regional geography". Geography is a chorological science (i.e., deals with distribution) which needs and uses the facts of many sciences to arrive at an understanding of differences between regions.
- (b) Geography is unified by its method and viewpoint and not by its subject matter. Much of its subject matter may be contained in other disciplines -- in history, in physics, in geology, in economics, etc. -- but its viewpoint is distinctive; it is the regional viewpoint.
- (c) The regional viewpoint infers the recognition of differences and of similarities between areas across the earth's surface. Regions are distinguished on the basis of definite criteria, both physical and cultural.
- (d) Classification of phenomena (physical or cultural) into categories of greater or lesser degree of generalization should lead to the understanding of areal variation in their occurrence and hence to an appreciation of regional distribution.
- (e) In recognizing relationships occurring between different classes of phenomena, e.g., areas of dense population coinciding with great natural resources, one must be careful to differentiate between cause and effect relationships and those relationships which are accidental.
- (f) The major device for demonstrating regional differences and distributions is the map. In addition the geographer uses a variety of descriptive devices including statistical diagrams of many kinds.

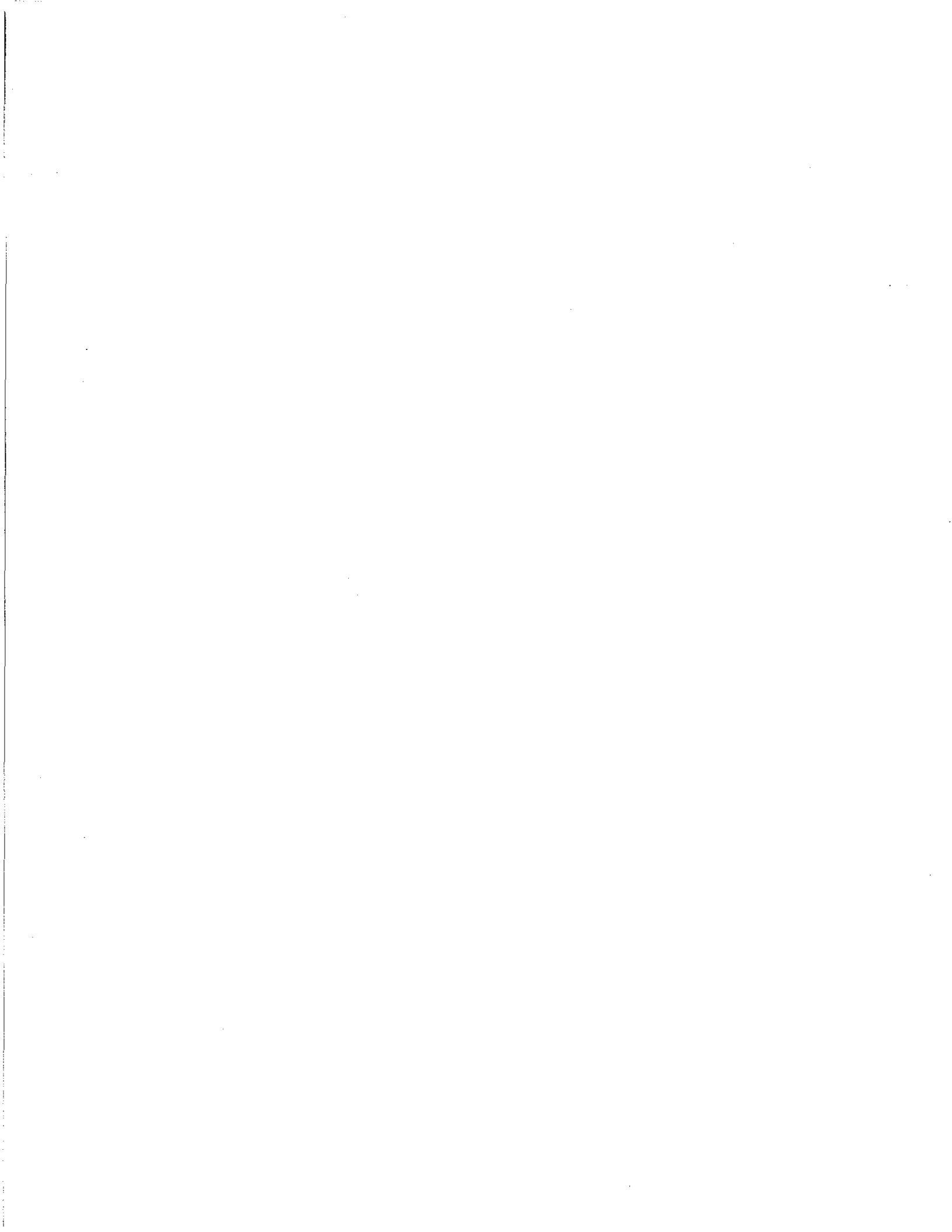
2. Skills

- (a) To read with comprehension in the field of geography.
- (b) To analyze, interpret and evaluate data provided in many forms (statistical, map, or other).

- (c) To discover geographical relationships and to recognize regional differences.
- (d) To present, orally and in writing, in organized fashion, the results of geographical research.
- (e) To use, and construct where possible, the various tools of geography including globes, maps, charts, and graphs.
- (f) To make case studies, local or other, and thus develop understanding of relationships between environment and human activities.
- (g) To undertake geographical studies, including elementary field work, of the local area to achieve first hand understanding of the fundamental approach of the geographer.

3. Attitudes

- (a) Recognition that the state of knowledge is not finite, that new methods of research and new concepts are continually evolving, that understanding of the world in which we live is very incomplete.
- (b) Willingness to undertake research with an open mind and to arrive at generalizations based on unbiased appraisal.
- (c) Willingness to recognize that cultural differences across the world are the result of geographical, historical and societal factors rather than a result of "racial" dissimilarities.
- (d) A willingness to recognize that regions of similar physical environment may be occupied by very dissimilar economics and societies and that these dissimilarities are a result of numerous factors including stage of cultural and technical development, together with differences in the objectives of the peoples concerned.
- (e) A willingness to understand that no region exists in isolation, that all parts of the world are inter-related and interdependent.



RECOMMENDED PROCEDURES

Geography describes the earth's surface with particular reference to the differentiation and relationship of areas. It is not an exact science which uses the logic of deduction. Its logic is inductive, appropriate to all the sciences of observation and experiment. This approach in the teaching of geography is accomplished by proceeding from the specific to the universal applications which will lead to generalizations.

The following procedures are recommended:

1. Exposition and explanation used in conjunction with diagrams, charts, slides, films, filmstrips, maps, globes, or other instructional aids.
2. Field trips with direct observation of geographical phenomena related to the topics being studied.
3. Student study of appropriate maps, globes, aerial photographs, films, filmstrips, charts, and collections.
4. Committee assignments and student projects.
5. Making the greatest possible use of library resources to supplement the student textbook.
6. Constructing tests and examinations which measure the student's ability to interpret maps, globes, charts, graphs, statistical data, and geographical descriptions, and to illustrate his answers with sketch maps and diagrams.
7. Undertaking a "sample study" of a selected region (See HISTORY AND GEOGRAPHY TEACHING MATERIALS, University of British Columbia - published by Gage in 1964.).

GRADE XI GEOGRAPHY TIME ALLOTMENT

A minimum of 120 minutes per week of regular student class time should be allocated to the course.

The following chart provides suggested periods of time for the study of each topic. It should be understood that these suggestions are intended primarily as a guide. Teachers are encouraged to adapt the course and time allotment to meet the needs of the particular situation. They are expected to use their judgement in the selection of topics and in the extent of coverage.

<u>Unit</u>	<u>Suggested Class Time</u>
I & II Discovery and Exploration Cultural Patterns and Economic Geography	3
III Appalachian Canada and Northeastern United States	4
IV The Great Lakes and St. Lawrence Heartlands	5
V The Prairies and Great Plains of Canada and the United States	6
VI The Western Cordillera	5
VII Middle America	2
VIII The Canadian Shield and Northland	4
IX The South	3
X The Place of North America in the World	2
XI Review	2

GRADE XI GEOGRAPHY MATERIALS

Maps

1. Relief-like North America No. RL5-14 Wenschow Relief Map (Denoyer - Geppert)
2. Comparative Wall Atlas No. 30 - 11 (North America - Set of 8) (Moyers)
3. For suitable stereo pairs, teachers should choose those which they need from the catalogue put out by the R.C.A.F. Aerial Photographs Division, Ottawa.

Books

Text: Tomkins & Hills, A Regional Geography of North America (Gage)

Teacher's Reference: Regional Geography of Anglo-America, White & Foscue, Anglo (Prentice-Hall)

Additional References

Anglo-America, Parker, (University of London Press)

A New Geography of Canada, Scarfe et al (Gage)

North America, Jones and Brian (Methuen)

Canada, A Geographic Study, D.Q. Innis (McGraw-Hill)

North America, Patterson (Oxford)

A Regional Geography of Canada, Putnam and Kerr (Dent)

Regional and Resource Planning in Canada, edited by Ralph R. Krueger et al (Holt, Rinehart & Winston)

The United States of America, (A Brief Regional Geography), Hildebrand, W. and McCaffray, C.J. (Holt, Rinehart & Winston)

SPECIFIC OBJECTIVES OF
THE GRADE XI GEOGRAPHY COURSE

The intention of this course is to provide an understanding of the geography of North America. The overall approach should attempt to provide understanding of the broad regional differences, physical and cultural, which occur within the continental area. Recognizing that political boundaries sometimes interfere with the full appreciation of geographic relationships the course has been designed to provide a framework of units, some of which may have international distribution while others may occur within a single nation. Nonetheless, it would be wrong to assume that major political boundaries, i.e., the international boundaries, are not geographic boundaries of considerable consequence: they interfere with free movement of men, materials, and even, sometimes, ideas -- and they were so created.

North America has been divided into a number of regions (units) which are not necessarily coterminous with the chapter headings of the text. These regions are broadly based, as far as possible, on groups of common characteristics. Obviously no line separates them but, rather, between them are broad zones of transition. Yet these regions do have validity and are useful as a tool in the analysis of all features which relate to the physical and cultural background of North America.

Basic to description, analysis, and synthesis in terms of the regional separates (units) is the use of maps pertinent to the separation and understanding of the regions.



GRADE XI GEOGRAPHY COURSE OUTLINE

UNIT I & II

(Unit I - Discovery and Exploration)

(Unit II - Cultural Patterns, Economic Geography: General Conclusions)

References: Chapters 1, 2, 3, 5, 12, 20, etc.

UNDERSTANDINGS TO BE DEVELOPED

1. North America is typified by north-south trending relief elements while the major political boundary, i.e., between Canada and U.S.A., trends east-west, thereby separating physically similar areas.
2. As a general characterization, North America can be separated into three main divisions: a northerly area too cold for agriculture; a western area generally too mountainous or/and too dry for agriculture, and an eastern humid area generally suited to agriculture.
3. These same divisions are applicable to North America as the home of the aboriginal population (map page 9) - the north representing the caribou, and other hunting areas; the western cordilleran area exhibiting specialized economics, not all based on agriculture; the eastern area showing adaptations to hunting in the drier interior and maize growing in the more humid sections.
4. These broad separates indicated here tend also to provide a gross picture of the distribution of population in North America, recognizing that some coastal and irrigated areas in the far west have developed large nodes of population.
5. But certain areas have been highly significant. The east, the area of initial settlement, faced Europe, receiving immigrants from the latter and developing trade with it. Major routes especially the Hudson-Mohawk, the St. Lawrence-Great Lakes, and the Mississippi, provided ingress to the continental interior and funnelled the products of the latter eastward.

Early industrial development occurred in the east and with the use of coal from the Appalachians and iron ores of the northeast and Lake Superior regions, the industrial supremacy of this area was ensured. Today the "heart" of North America

includes much of the north-eastern and mid-western United States together with the adjacent Great Lakes - St. Lawrence Lowland area of Canada. City development has been great and, today, many of these cities have grown to incorporate or make contact with satellites or other cities: indeed along the east coast from southern New England to Baltimore there is almost continuous urban development, making this the outstanding conurbation in the world -- a megalopolis.

6. The United States has demonstrated man's abilities to develop continental resources and has achieved the highest standards of living in the world. Canada, with lesser population and with its rather narrow zone of high potential for development, shows many parallels in growth. But in Central America, for many reasons, development has been slower. Both Canada and Central America show considerable emphasis on the export of raw materials and dependence on foreign, especially American, development capital.

SUGGESTED ORGANIZATION OF CONTENT

Unit I

1. Discovery and Exploration (brief treatment, see Chapter 1)
2. The Physical Pattern (highly generalized: relate to Grade X)
 - (a) Major land forms: relief, drainage, continental shelf, general geology.
 - (b) Climate: general introduction to the elements of climate; major climatic types.
 - (c) Natural Vegetation and Soils: (recognize induced changes, e.g. forest clearing).
 - (d) Conclusion: synthesis leading to separation of, e.g., natural regions: should point up -
 - reasons for separations
 - difficulties and advantages in terms of development of each region.

Unit II

1. Cultural Patterns
 - (a) The American Indians and Eskimo: forest, grassland, etc.,

cultures and adaptations to environment. See Chapters 2, 17, 5, etc.

- (b) Colonization, Expansion, and Political Changes. (See Chapter 2) Spanish; French; English; Russian (Chapter 20); Negro introduction. Nineteenth Century European Immigration.
 - (c) Present population distribution (See Chapter 3 for map and use Unit I for explanations). Patterns and nodes. (General).
2. Patterns in Economic Geography (General aspects; relate to Grade X course)
- (a) Geography of mineral production: Fuels - coal, petroleum, natural gas, (regionalize and place in historical perspective). Metallic - Iron ores, nickel, etc., (regionalize). Non-Metallic - potash, asbestos, etc., (main); attempt to relate to Geology in Unit I.
 - (b) Primary Production (relate to Unit I). Fur Trade - general areas and characteristics. Timber - main areas (Northern Forests, Pacific N.W., S.E.U.S.A.). Agriculture - general agricultural regions. (mixed farming, grain, ranching, sub-tropical, irrigation agriculture, etc.). Fisheries - general; Atlantic; Pacific, etc. (Chapter 12).
 - (c) Transportation and Communications (Chapter 12). Land Routes (early settlement; roads and railroads - pattern). Waterways: main corridors (canals, rivers, lakes). Air Routes - patterns and nodes. Communication - telecommunications (an index of economic activity - compare air routes).
 - (d) Manufacture and trade. Historical sketch of history of manufacturing (early craft to complex industry). Manufacturing regions: general characteristics and factors affecting location.
3. General Conclusions summarizing Units I and II
- (a) Stressing geographical relations (general resumé)
 - (b) Separating eight geographic regions based on physical and cultural factors - list those to be used in framework of course.

UNIT III

Eastern North America : Appalachian Canada: Northwestern United States.

References: Chapters 4 and 14

UNDERSTANDINGS TO BE DEVELOPED

This is a region of hill lands extending from Maritimes into the U.S.A. Here the Atlantic Ocean constituted an important focus, and settlement was early. But major differences in economic development between the American and the Canadian sections have become increasingly apparent. While there are physical differences between the Maritimes and the North-East United States, differences in economic development cannot be directly attributed to these. Therefore, explanation of economic differences between these two areas must have basis in other factors.

NOTE: Underlined sections in the above represent the major understandings to be developed.

SUGGESTED ORGANIZATION OF CONTENT

1. Physical

- (a) Physiography - part of Appalachian region; complex geological history, ancient crystalline and sedimentary rocks. Terrain complicated: Appalachian folds; dissected plateaus; basins and lowlands of sedimentary rock; glaciated over much of area; indented coastline and harbors; major rivers and routeways.
- (b) Climate - Maritimes, New England, Northern New York, etc.: modified continental. Further south: milder conditions.
- (c) Vegetation: originally mainly mixed forest.

2. Historical Development

Exploration, settlement and orientation to Europe.

3. Economic Development

- (a) Canadian -- fish, forest, mine, farm (deteriorating by end of 19th century). Separation from Lower and Upper Canada. Differences, e.g., Newfoundland vs Prince Edward Island.
- (b) American -- farm, forest, fish, mining, commerce and industry in New England.
 - agriculture, commerce, industry in North Atlantic Plain
 - westward movement; coal in Central Appalachian
 - opening of continental interior and effects.

4. Population, Urbanization, Present Economy

Density of population; comparison and relation to physical features; sites, location, routes; "megalopolis" (Boston to Baltimore continuous urbanization, greatest in world). Modern economy; general statement.

5. Explanation of differences in American and Canadian Development.

UNIT IV

The Great Lakes and St. Lawrence Industrial Heartland

References: Chapters 5, 6, and 16.

UNDERSTANDINGS TO BE DEVELOPED

1. The development of the lowlands was stimulated by their accessibility to the peoples and markets of Western Europe.
2. The region possessed a climate which proved fairly well suited to intensive agricultural development within the lowlands.
3. Much of the early industrial capacity was a direct outcome of the agricultural production of the region.
4. The natural waterways in this region have provided a major impetus to the development of this, the industrial heart of North America.
5. Heavy concentration of population has transformed many features of the landscape.

SUGGESTED ORGANIZATION OF CONTENT

Location: accessibility to Western Europe and to continental interior through St. Lawrence and Great Lakes; mid-latitude climate and its characteristics; physiography; proximity to the Shield's minerals.

People: concentrations of population; changing landscape; progress of settlement; contrasting cultures.

Agriculture: soils and vegetation; characteristics of the St. Lawrence, Southern Ontario, and Corn Belt areas.

Transportation and Power: early development of transportation, river and canal; railroad net-works; St. Lawrence Seaway; power sources and development.

Industry: factors contributing to industrial development; types of industry.

UNIT V

Region: The Prairies and the Great Plains Region of Canada and the United States.

Theme: Climatic conditions, soil fertility, and topography make the Great Plains primarily an agricultural region. Mechanization, diversification, specialization, and irrigation have produced changes in farming methods and life. The introduction of manufacturing and mining (oil, gas, and potash) have broadened the economic base of the region and tend to give it greater economic stability.

References: Chapters 9 and 17.

MAJOR UNDERSTANDINGS TO BE DEVELOPED

1. Variation in climate and topography related closely to differences in farming and ranching activities, some areas specializing, as for example, in Spring wheat.
2. Dry climate has necessitated the development of special farming techniques and seed varieties.
3. Large farming units and principles of "Big Business" are characteristic of most forms of land-use.
4. Economic stability has been promoted through crop diversification, irrigation, improved methods of cultivation, government aid, etc.; development of mineral resources (coal, petroleum, natural gas, potash, etc.) and the introduction of industry have also assisted in providing greater economic diversity.
5. The Plains are sparsely settled. Changes in the economy and in transportation and other facilities have led to rural depopulation and to urbanization. Major cities, e.g., Edmonton, Calgary, Winnipeg, Kansas City, Denver, etc., tend to lie on the margins.
6. The 49th parallel separates politically but does not create essential differences in land-use.

SUGGESTED ORGANIZATION OF CONTENT

1. The Physical Environment
 - (a) Geographical limits.

- (b) Topography: Prairie levels, landforms
 - (c) Climate
2. The Historical Development
- (a) Indians, Explorers, Fur-traders
 - (b) First settlers in the U.S.A.: Spanish, Texans, ranchers, farmers.
 - (c) Pioneer farmers and ranchers on the Canadian Prairies
 - (d) The building of railways
 - (e) The completion of settlement
3. Agriculture
- (a) Regions:
 - Manitoba and the Red River Valley
 - The spring wheat belt
 - The mixed farming belt
 - The pioneer fringe
 - The dry belt
 - The winter belt wheat
 - The cotton belt
 - (b) Products: factors determining production - climate soil, topography, irrigation, markets.
 - (c) Problems: conservation of fertility and moisture, markets; cost-price squeeze; capitalization costs; "disappearance" of family farm; vagaries of climate.
4. Non-Agricultural Production
- (a) Mining - oil, gas, potash, coal.
 - (b) Manufacturing - related to resources.
5. Urban Centres
- (a) Canada: Winnipeg, Regina, Edmonton, Calgary, Saskatoon.
 - (b) U.S.A.: Denver, Kansas City, Bismark, Minot, and others.

6. Trends

- (a) Declining rural population
- (b) Mechanization
- (c) Increasing size of farms
- (d) Extension of irrigation
- (e) Increased yields and diversification
- (f) Industrial development
- (g) Changes in transportation - curtailment of railway services - improved highways
- (h) Increasing government regulations to promote stability.

UNIT VI

The Western Cordillera

Theme: The Region of Diversity and Contrast

References: Chapters 10, 18, 19, and 20.

MAJOR UNDERSTANDINGS TO BE DEVELOPED

1. The Western Cordillera is a good example of "Unity in diversity". The variety of landforms, climate and human response gives the whole region a distinctive geographic personality.
2. The Western Cordillera exhibits the greatest contrasts in human and economic geography found in any part of the North American continent; these contrasts are apparent in agriculture, fisheries, forest industries, minerals, power, and industry.
3. There is a close relationship between the irrigated lands of the cordilleran region and the distribution of agriculture and population.
4. The Western Cordillera is an area potentially rich in resources but man has had to overcome natural handicaps in their development.

SUGGESTED ORGANIZATION OF CONTENT

The Western Cordillera is a complex, diversified area of mountain ribs, longitudinal valleys, vast plateau areas, basins and scattered lowlands. This vast region can be divided into a large number of sub-regions each with its varied characteristics, physiographic and climatic.

1. The Western Cordillera as a Whole

The study of this region should begin with an overview of the Western Cordillera with attention given to the physiographic and climatic characteristics, the soil, vegetation and main economic activities arising from man's utilization of resources. This may be done on the basis of the three major divisions - the Western Cordillera of Canada and Alaska, the Pacific Northwest of the United States, the American Southwest.

2. A Study of Sub-regions of the Western Cordillera

Because of the considerable detail in the textbook it will be necessary to use a survey treatment of sub-regions giving attention specifically to the following: chief physiographic and climate characteristics, soil and vegetation, major economic activities, and the chief towns and cities.

The following would be the sub-regions in each of the major divisions:

- (a) The Canadian Western Cordillera and Alaska:
Peace River District of British Columbia; Eastern Mountains; Southern Interior; Central and Northern British Columbia; the Yukon; Coastal and Insular Mountains; Coastal Lowlands; Alaska.
- (b) The Pacific Northwest of the United States:
Western Washington and Oregon; the Columbia Basin; The Rocky Mountains.
- (c) The American Southwest:
Central and Northern Coast of California; Central Valley of California; Sacramento section of the Great Valley; San Joaquin section of the Great Valley; the Sierra Nevada; Southern California; the Basin and Range section of California; the Southwestern Interior.

3. Sample Studies of the Western Cordillera selected from the following:

- (a) Central Valley of California irrigation projects.
- (b) Power developments of the Columbia Basin.
- (c) The Puget Sound area of the Pacific Northwest including Seattle, Tacoma and Vancouver.
- (d) The fruit industry of the Okanagan Valley of British Columbia.
- (e) Urban development in Southern California - Los Angeles Metropolitan area.
- (f) San Francisco Bay area - Study of economic development.

UNIT VII

Middle America

Theme: North American Tropical Province

References: Chapters 22 and 23.

UNDERSTANDINGS TO BE DEVELOPED

1. Tropical climate and its effects on vegetation and land-use.
2. Geographical location and land forms and their influence on agriculture and settlement.
3. History of settlement and population characteristics.
4. Poverty of the masses, riches of the few.
5. Development of resources.
6. Contrasts between Middle America and the United States and Canada in products, exports and economic development.
7. Economic interdependence with northern neighbors.

SUGGESTED ORGANIZATION OF CONTENT

1. Location
Position between North and South America. Significance of this location.
2. Geographic Characteristics
 - (a) Landforms
 - (b) Relief features
 - (c) Drainage
 - (d) Coastal features
3. Tropical Environment
 - (a) Climate, soil and vegetation

- (b) Crops
- 4. Cultural Patterns
 - (a) Conquest and settlement
 - (b) Plantation and hacienda
 - (c) Systems of landholding
 - (d) Contrast of poverty and riches
 - (e) Mixture of races and cultures
- 5. Resource Development
 - (a) Agriculture
 - (b) Minerals, power and industry
 - (c) Transportation
 - (d) Exports and imports
- 6. Sample Studies of Middle America
 - Selection from:
 - (a) Urban study - Mexico City
 - (b) The Plantation and hacienda systems of Middle America.

UNIT VIII

The Canadian Shield and the Northland

Theme: Canada's Natural Treasure House

References: Chapters 7, 8, 10 (Yukon), and 11

UNDERSTANDINGS TO BE DEVELOPED

1. There is a close relationship between peneplanation, uplift, stream rejuvenation, glaciation and permafrost, on the one hand, and the problems of land and water transportation and communication, poor drainage, the scarcity of arable soil, hydro-electric power potential and the accessibility of mineral deposits, on the other.
2. The physical characteristics - terrain, permafrost, climate - of the Canadian Shield and Northland create major obstacles to transportation and communication. These in turn retard the utilization of resources and the extension of settlement.
3. The nature of rock structure and the effects of glaciation are related to the comparative surface accessibility of mineral deposits.
4. The Canadian North possesses great potential wealth in furs, forest products, minerals, hydro-electric power, and even agricultural lands (Clay belt). Present and future development of these resources is contingent on over-coming the handicaps of a short growing season, permafrost, muskeg, great distances, difficult climate, difficulties of road and railway construction, the expense of air transport and isolated settlement patterns.
5. The Eskimo has survived in the northern desert (tundra) by developing skills that enable him to exploit the meagre offerings of his environment, particularly those of the sea.
6. The location and vast extent of the Northland has given the region a new significance strategically.

SUGGESTED ORGANIZATION OF CONTENT

1. The Canadian Shield

- (a) Location: See map, page 183.
- (b) Physical characteristics: relief; rock structure, drainage pattern; climate; vegetation and soils.
- (c) Development of natural resources: early fur trade; beginnings of lumbering; beginnings of mining in the Canadian Shield; power development.
- (d) Modern Development of the Canadian Shield. Development in each of the eight major sub-regions of the Canadian Shield:
 - Labrador-Ungava: iron ore
 - Lake St. John-Saguenay District: lumbering; agriculture; hydro-electric power; aluminum manufacture (Arvida).
 - Laurentians - power development; pulp and paper industry; tourism; lumbering; mineral wealth.
 - Nipissing-Huron: farming; lumbering; hydro-electric power; mining - copper, nickel, platinum, uranium, steel industry (Sault Ste. Marie).
 - The Clay Belt: agriculture; power; lumber; mining of gold, copper, lead and zinc.
 - Hudson Bay Lowland: furs; grain shipment (Churchill); etc.
 - Northwestern Ontario: iron and gold mining; pulp and paper; agriculture; hydro-electric power; grain shipment.
 - The Western Shield: hydro-electricity; mining; uranium; etc.
- (e) The future of the Canadian Shield:
 - The enormous importance of the Canadian Shield to the economy of Canada.
 - The problems of its future development.

2. The Canadian Northland (i.e., North of the Treeline)

- (a) Relative location: See map, page 321. Various ways of defining the boundaries of the Arctic and Northlands.
- (b) Geographic characteristics of the Northland: Distribution of Eskimo culture; the adaptation of the Eskimo to his environment; reliance upon the sea; the strategic significance of the Northland.

- (c) Climatic characteristics of the Northland: Long, cold winters and short, cool summers; altitude of sun; low and short daylight periods, lowest mean temperatures in winter; transition seasons of spring and autumn short; frost possible almost any day of the year; anti-cyclone conditions dominate winter months; precipitation varies from 30 to 2 inches per year with the average 10 to 15 per year.
 - (d) Physical landscape of the Northland: low, level, tundra plains and rounded barren hills; rolling plateau landscape; mountain and icecap.
 - (e) Inhabitants of Northland: human; land and sea animals.
 - (f) Economic activities: agriculture absent; mining; transportation.
 - (g) Significance and future of the Northland.
3. Sample study of a selected development in the Canadian Shield and Northland chosen from:

The Saguenay District (Hydro-electric power and aluminum)
Sault Ste. Marie - Nipissing-Huron Sub-region
Iron ore in the Schefferville district
Flin Flon - Western Shield
Baffin Island settlement

UNITE IX

The South

References: Chapter 15.

UNDERSTANDINGS TO BE DEVELOPED

This is an area characterized by recent massive economic and political changes. The original pattern of English settlement, based on the plantation, led to the importation of slave labor and its social consequences. The breakdown of plantation agriculture led to new patterns of land-use and the relocation of some older activities, e.g., cotton to drier areas. This has been a difficult area marked by cleavage in economic and cultural opportunity. Industrial activity is increasing, e.g., Gulf Coast, T.V.A., (as example of change); and forms and types of agriculture are undergoing rapid transformation. The South is no longer the "cotton belt" or the "deep south" but a competitive region within the American complex.

SUGGESTED ORGANIZATION OF COURSE CONTENT

1. Historical Geography.
2. Physical Geography.
3. Economic Geography (broad aspects)
 - (a) Agriculture (change and specialization)
 - (b) Mining, Industry, Water Resources
 - (c) Tourism
 - (d) Urbanization
4. The Regional Separates (Map, page 431)
5. Population characteristics

UNIT X

The Place of North America in the World

SUGGESTED ORGANIZATION OF COURSE CONTENT

1. Continental size and comparisons

- (a) Area: 9.4 million square miles (i.e., smaller than Asia and Africa but two and one-half times as large as Europe and three times the size of Australia).
- (b) Extent: from 8°N to 84°N but bulk in middle latitudes.
- (c) Population: 230 millions (i.e., roughly one-sixth that of Asia, less than half that of Europe, and, roughly, similar to Africa).
- (d) Space Relations: New York 3,000 miles from Europe; San Francisco 5,200 miles from Yokahama; N.B., Panama route and Polar route (air). Separation by oceans from all continents except South America (N.B., Bering Strait).

2. Agricultural Comparisons

North America: leads all the continents in the production of corn (the outstanding crop of North America), oats, sugar and cotton. Produces almost as much wheat and as much rice as Europe. Leads Asia (whose outstanding crop is rice) in wheat production. Possesses huge areas capable of sustaining intensified agriculture or permitting agricultural land expansion.

3. Minerals and Power comparisons

Outstanding resources of: coal; iron ore; petroleum and natural gas; hydro-electric power; copper, zinc, nickel; sulphur; potash and phosphates, etc.

4. Transportation and Communication (contrast with much of the World)

Deep inland penetration by waterways. Highly developed rail, road, air, pipeline, etc., systems.

5. Industrial Development (contrast with much of the world)

Highly developed and complex.

6. Standards of living (compare with other countries)

High.

7. National Separates of North America and their differences in development.

Explanations: unequal development of the parts.

8. American Industrial and Commercial Domination of Continental Area.

9. American Industrial and Commercial Involvement Overseas (compare with Great Britain - pre-1914, free flow of capital, foreign investment, etc.).

10. American International Political Involvement:

"Free World" nucleus

Pan-Americanism.