

International Baccalaureate

Geography Syllabus

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Course Rationale:

“Geography is a dynamic subject that is firmly grounded in the real world and focuses on the interactions between individuals, societies and the physical environment in both time and space.

” – IBO Geography Course Outline

Geography is an interdisciplinary subject area that bridges the social and physical sciences. By nature this branch of learning challenges individuals to apply what is known about the physical landscape with how humans respond to that physical landscape. A Geographer must apply concepts of physical geography (location, place, region, physical features) with how societies have developed around the world. Therefore the study of geography is firmly rooted in the overarching concept that our physical landscape determines who we are as a civilization and society. Geographers must be independent thinkers who combine all of these subject areas to analyze and interpret various themes covered throughout this course.

Personal Philosophy:

I approach the social sciences as a sequence of events subject to interpretation. I will engage you in the material; you will read, write, note take, think, debate, present your opinion, defend your opinion, and maybe even change your opinion. In order for this course to flow and cover the extensive material, I structure it so that you are responsible for your learning. As a citizen of this classroom you will be responsible for knowing the course expectations listed below.

Course Objectives:

- Students will be expected to demonstrate geographical understanding through the acquisition, selection, and effective use of knowledge.
- Students will be expected to comprehend, analyze, and evaluate sources as evidence.
- Students will be expected to evaluate different approaches to, and interpretations of geography.
- Students will be expected to present geographical explanations using arguments that are clear, cohesive, relevant, and well substantiated.
- Students will be expected to compare and contrast issues across the five themes of geography.
- Students will be expected to undertake individual research and present results using a formal plan of organization and presentation.
- Students will be expected to demonstrate in-depth understanding geographic themes discussed in this course using an intellectual and open mind.

Becoming Social Scientists:

- Students will demonstrate knowledge and application of geographical themes and principles.
- Students will be able to gathering, sorting, and processing geographical evidence.
- Students will cultivate skills required to evaluate of various sources based on their origin, purpose, value, culture, language, perspective, and limitations
- Students will be able to recognize and evaluate the connection between geography and human civilization.
- Students will recognize and express geographical themes in written, data based, and oral formats.
- Students will cultivate argumentative writing that applies concepts and sources to course themes.

Course Outline:

Part 1: Core theme – patterns and change (70 hrs.)

Unit Goals

1. Populations in transition

- **Population change (5 hrs.)** Students will be able to analyze and interpret birth rates, fertility rates, life expectancy and population pyramids. Students will compare and contrast differences between “first” and “third” world countries (E.U./U.S.A. vs. Sub-Saharan Africa/Middle East)
- **Responses to high and low fertility (4 hrs.)** Students will evaluate population trends in high and low fertility areas. Students will analyze and interpret pro-natalist and anti-natalist policies in China, India, and E.U.
- **Movement responses – migration (6 hrs.)** Students will evaluate and interpret the various “push and pull” factors of migration. Students will analyze both forced and voluntary migration. Students will also analyze the impact of migration on nations of origin and destination. (Examples: United States, Middle East, South-East Asia, Africa)
- **Gender and change (4 hrs.)** Students will examine the role of gender change and inequality in population trends. Topics will include; culture, status, education, birth ratio, health, employment, empowerment, life expectancy, family size, migration, legal rights, and land rights.

2. Disparities in wealth and development

- **Measurements of regional and global disparities (3 hrs.)** Students will utilize the HDI Human Development Index to analyze infant mortality, education, nutrition, income, marginalization, etc. to measure disparities in different nations around the world.
- **Origin of disparities (3 hrs.)** Students will analyze and evaluate the origins of global disparities in China, The United States, Congo, and Afghanistan.
- **Disparities and change (5 hrs.)** Students will identify and explain the changing patterns in global disparities of life expectancy, education and income in China, The United States, The European Union, and Afghanistan. Students will examine what progress has been made toward the Millennium Development Goals (MDGs) in poverty reduction, education and health.
- **Reducing disparities (5 hrs.)** Students will evaluate and analyze which disparities around the world can be reduced. The teacher will emphasize trade, market access, debt relief, aid, and remittances in this activity.

3. Patterns in environmental quality and sustainability

- **Atmosphere and change (4 hrs.)** Students will be able to identify and evaluate the function and parts of the atmospheric system. Students will be able to later analyze the external forces contributing to atmospheric changes within this system.
- **Soil and change (4 hrs.)** Students will identify the causes and consequences of soil degradation in countries around the world.
- **Water and change (5 hrs.)** Students will identify and evaluate the causes and consequences of water issues facing the world today. Students will examine the environmental and human factors affecting physical and economic water scarcity.
- **Biodiversity and change (3 hrs.)** Students will identify and evaluate the importance of biodiversity in tropical rainforests. Students will examine the consequences of reducing this biodiversity in this biome. Students will focus on the Congo Rainforest.
- **Sustainability and the environment (3 hrs.)** Students will be able to define and identify the importance of environmental sustainability. Students will later evaluate what managements systems (local, regional) could achieve long term environmental sustainability.
- **Special Note:** During this sub-topic students will evaluate these issues in the nations of The United States, The European Union, The Democratic Republic of the Congo, China and Afghanistan.

4. Patterns in resource consumption

- **Patters of resource consumption (4 hrs.)** Students will evaluate the ecological footprint. They will utilize this measure to understand international variations between footprint “sizes”. Students will compare The United States, China, Afghanistan, and The DRC.
- **Changing patterns of energy consumption (8 hrs.)** Students will examine global patterns in the production and consumption of oil. Students will identify this problem and evaluate the geopolitical and environmental impact this has on the world.
- **Conservation strategies (4 hrs.)** Students will discuss resource consumption, conservation and reduction (recycling, substitution). Students will evaluate the impact of these issues on a regional and global scale.

- **Special Note:** During this sub-topic students will evaluate these issues in the nations of The United States, The European Union, The Democratic Republic of the Congo, China and Afghanistan.

Part 2. Leisure, Sport and Tourism (30 hrs.)

1. Leisure (2 hrs.)

- Students will evaluate the difficulties in attempting to define leisure, recreation, tourism and sport. They will evaluate the role of technology and growth in regions of leisure, sport and tourism.

2. Leisure at the international scale: tourism (4 hrs.)

- Students will evaluate supply and demand in international tourism. They will examine location and development of different tourist activities.

3. Leisure at the international scale: sport (4 hrs.)

- Students will evaluate the social, cultural, economic and political factors affecting participation and success in the international sports of soccer (futbol) and basketball. They will analyze how geography affects different regions participation in this sport and sports locations.

4. Leisure at the national/regional scale: tourism (6 hrs.)

- Students will evaluate supply and demand in national and regional tourism. They will examine location and development of different tourist activities. Students will focus on the greater Michigan area and its identity as a tourist destination.

5. Leisure at the national/regional scale: sport (3 hrs.)

- Students will examine the hierarchy of baseball and the location of its teams. Students will analyze how and why residents/non-residents support this team.

6. Leisure at the local scale: tourism (4 hrs.)

- Students will identify and evaluate local tourism in the greater Plymouth-Canton area. They will evaluate the geographic advantages and disadvantages of this location in relation to tourism.

7. Leisure at the local scale: sport and recreation (4 hrs.)

- Students will identify and evaluate local sport and recreation in the greater Plymouth-Canton area. They will evaluate the geographic advantages and disadvantages of this location in relation to tourism.

8. Sustainable tourism (3 hrs.)

- Students will be able to analyze and define what sustainable tourism is. They will examine different environments locally and globally where this would be successful or not successful.

Part 2: The Geography of Food and Health (30 hrs.)

1. Health (4 hrs.)

- **Variations in health** Students will analyze and interpret changes in life and expectancy on a national and global scale since the 1950s. Students will explain how income and lifestyle affect this trend in different regions. (The United States, China, European Union, Afghanistan, Congo)
- **Measuring health** Students will evaluate life expectancy, infant mortality rates, and health-adjusted life expectancy. Students will evaluate how calorie intake and access to clean water affects health.
- **Prevention relative to treatment** Students will discuss the geographic factors that affect policy makers around the world with issues of treatment. Students will evaluate the nation of The Democratic Republic of the Congo in Africa.

2. Food

- **Global availability of food (1 hr.)** Students will evaluate global patterns of calorie intake. Students will distinguish between malnutrition, temporary hunger, chronic hunger and famine.
- **Areas of food sufficiency and deficiency (3 hrs.)** Students will explain how changes in agriculture, technology and innovations have impacted the food business. Students will also focus on the areas of the Green Revolution and Agribusiness.
- **Case study (4 hrs.)** Students will evaluate the causes and responsibility of the recent famine in Somalia. Students will evaluate the role of government and the people in such a catastrophic event.
- **Production and markets (3 hrs.)** Students will analyze the role of government and international relations in the trade of food. Students will interpret agreements between governments and countries and how trade impacts these issues.
- **Addressing imbalances (3 hrs.)** Students will analyze how food aid, free trade, and fair trade are conducted around the world. Students will evaluate the role of “money” and political/popular support in this issue.
- **Sustainable agriculture (2 hrs.)** Students will be able to define sustainable agriculture of energy efficiency ratios and sustainable yields. Students will evaluate on a local and global level how sustainable agriculture can be conducted.

- **Special Note:** During this sub-topic students will evaluate these issues in the nations of The United States, The European Union, The Democratic Republic of the Congo, China and Afghanistan.

3. Disease

- **Global patterns of disease (2 hrs.)** Students will be able to explain the global distribution of disease of affluence and disease of poverty. Students will evaluate these issues in diverse nations/regions.
- **The spread of disease (4 hrs.)** Students will evaluate the spread of disease around the world. Students will examine the barriers and limits for the spread of disease, as well as how disease reduction can occur.
- **Geographic factors and impact (4 hrs.)** Students will examine how geography plays a role in the spread of disease. There will be focus on the spread of AIDS in Africa, and The Ebola virus in tropical regions (South America).

- **Special Note:** During this sub-topic students will evaluate these issues in the nations of The United States, The European Union, The Democratic Republic of the Congo, China and Afghanistan.

Fieldwork (20 hrs.)

Part 3: HL extension – Global interactions (60 hrs.)

1. Measuring global interactions (4 hrs.)

- **Global participation** Students will evaluate the AT Kearney index to measure global interactions between countries around the world. Students will discuss how we will use this index to evaluate different global issues.
- **Global core and periphery** Students will identify what makes the global core and periphery areas of a city. Students will make and evaluate these areas in different cities around the world.

2. Changes space – The shrinking world (12 hrs.)

- **Time-space convergence and the reduction in the friction of distance** Students will examine how technology and the global market place have reduced travel boundaries. Students will evaluate how air and roads have contributed to this change in the geographic environment.
- **Extension and density of networks** Students will examine the changes in transportation, Internet and telecommunications. They will examine the role in technology and technology integration in creating a global network.

3. Economic interactions and flows (8 hrs.)

- **Financial flows, Labour flows, Information flows** Students will evaluate how finances, labour, and information flow in economic infrastructures. In the financial structure, students will evaluate loans, debt, and development. In the labour market students will evaluate the nations of China and The Democratic Republic of the Congo. In the information market students will evaluate how information has contributed to outsourcing on a global level.

4. Environmental Change (8 hrs.)

- **Degradation through raw material production** Students will evaluate how the extraction and production of raw materials effect the physical environment. Students will later address how individual raw materials such as oil, coal, etc. have consequences on the environment during extraction, transportation, and use.
- **The effects of transnational manufacturing and services** During this topic students will answer the basic question; what are the ramifications of transporting waste to countries with poor environmental regulations for disposal?
- **Transboundary pollution** Students will evaluate how the Gulf Oil Spill affected multiple nations in the Gulf Region. Students will analyze the responses and consequences to this tragedy. Lastly, students will identify and apply The World Bank's role in nations around the world.

- **Homogenization of landscapes** Students will identify and analyze the evolution of uniformed urban landscapes. How has globalization and best practice contributed to common commercial activity, structures and styles of construction/infrastructure?

5. Sociocultural exchanges (8 hrs.)

- **Cultural diffusion: the process** Students will answer the complex question; how as globalization led to cultural diffusion? What areas of our lives have been influenced by cultural sharing and interaction?
- **Consumerism and culture** Students will evaluate how the media and TNCs have spread consumer culture throughout the world. Students will examine “Levi’s Blue Jeans” and “UGG Boats” have become a global commodity of “cool”.
- **Sociocultural integration** Students will examine the contrasting role of Diasporas in preserving culture in The Philippines and well as the impact of cultural diffusion in the remote/indigenous area of Yemen. Lastly, students will evaluate how these contrasting areas are defined by their geographic location.

6. Political Outcomes (10 hrs.)

- **Loss of sovereignty** Students will discuss the links between the diminishing effectiveness of political borders and the flow of goods, capital, labour, and ideas in the European Union. Students will evaluate and compare the wealth of various nations in this region.
- **Responses** Lastly in this unit students will evaluate the various responses to globalization. Why have nationalism, anti-globalization and migration control issues arisen in the global age?

7. Global interactions at the local level (10 hrs.)

- **Defining glocalization** Students will understand and evaluate the similarities and differences between globalization and glocalization.
- **Adoption of globalization** Students will evaluate the complex question; how have commercial activities become global activities?
- **Local responses to globalization** Students will explore and interpret various responses to globalization. This will allow students to focus on positive and negative local responses to global issues. Students will ask and answer the question; what are the costs and benefits of globalized production?

- **Alternatives** Lastly students will explore the alternatives to globalization. They will describe the role of civil societies in supporting local economic activities and supporting local cultural values. Why have anti-globalization groups gained prominent position in some places?

Part 2: Urban Environments (30 hrs.)

1. Urban Populations (2 hrs.)

- Students will define and analyze; urbanization, inward movement, outward movement, natural change, and the global megacity. Students will apply these terms to concepts learned within this unit.

2. Urban land use

- **Residential areas (4 hrs.)** Students will examine the role of residential neighborhoods in relation to wealth, ethnicity and family status. Students will later examine the role of urban poverty and deprivation in the local urban area of Detroit.
- **Areas of economic activity (4 hrs.)** Students will analyze the spatial patterns of economic activities. Students will evaluate zoning in urban and suburban environments, answering the fundamental questions of who lives where and why? What role does the government play in determining where people live and why?

3. Urban stress

- **Urban microclimate (4 hrs.)** Students will evaluate the effects of structures on the environment. This will focus on a study of urban heat islands and pollution in Beijing and Los Angeles.
- **Other types of environmental and social stress (4 hrs.)** Students will examine the stress urban environments place on various peoples. This will include a study of congestion, housing, crime, inequality, and waste overburden. Students will do focus studies on Detroit, Beijing, Delhi, and Paris.

4. The sustainable city

- **The city as a system (2 hrs.)** Students will evaluate and interpret what a city needs to survive. They will focus on inputs (energy, water, people, food, etc.) and outputs (waste, noise, people).
- **Case studies (4 hrs.)** Students will perform case studies on the urban environments of Detroit, Beijing and Delhi. Students will focus on how these cities provide sustainability management and deal with urban ecological footprints.

- **Sustainable strategies (6 hrs.)** Students will choose one of the case study cities (Beijing, Detroit, Delhi) to analyze and interpret how these cities provide housing, pollution, and growth strategies.

Part 2: Freshwater – Issues and conflicts (30 hrs.)

1. The water system

- **The hydrological cycle (2 hrs.)** Students will review, define and identify the hydrologic cycle.
- **Water balance (1 hrs.)** Students will evaluate the goals and potential problems in the hydrologic cycle.

2. Drainage basins and flooding

- **Drainage basins (2 hrs.)** Students will evaluate and identify the function of a drainage basin. This background knowledge will be built upon in later topics.
- **Discharge (1 hr.)** Students will evaluate and identify stream discharge. They will examine the relationship between stream flow and channel shape.
- **Hydrographs (3 hrs.)** Students will define the characteristics of a hydrograph. They will examine the reasons and variations of hydrographs and how it is used to forecast floods.
- **Floods (3 hrs.)** Students will discuss natural and human causes and consequences of floods. Students will evaluate local causes and consequences of floods suggesting possible solutions to these problems.
- **Special Note:** During this sub-topic students will evaluate these issues in the nations of The United States, The European Union, The Democratic Republic of the Congo, China and Afghanistan.

3. Management issues and strategies

- **Dams and reservoirs (2 hrs.)** Students will examine the changes resulting from the construction of dams and reservoirs. Students will focus on local and international examples.
- **Floodplain management (3 hrs.)** Students will explain and define stream channel processes. They will examine human modification of flood plains and costs/benefits of this system.
- **Groundwater management (2 hrs.)** Students will answer how humans manage groundwater. Students will focus on basins and aquifers.

- **Freshwater wetland management (2 hrs.)** Students will evaluate and identify the role of wetlands as a natural resource. They will identify different strategies for managing wetlands and natural resources.
- **Irrigation and agriculture (3 hrs.)** Students will examine the environmental impact of agriculture and irrigation on groundwater. Students will evaluate water quality and pollution. This section will focus on agriculture and human/environmental impact.

4. Competing demands for water

- **Conflicts on a local, regional and international scale (6 hrs.)**
- **Special Note:** During this sub-topic students will evaluate these issues in the nations of The United States, The European Union, The Democratic Republic of the Congo, China and Afghanistan.