

Title : Physical Geography

विषय: भौतिक भूगोल

Course Code: GEOGP 101 CC

कॉर्स कोड : जीईओजीपी 101 सी.सी.



Dr. Jagdish Chand

Assistant Professor (Geography)

Govt. College Sangrah

Year	Core Courses	Ability Enhancement Compulsory Course (AECC) (2)	Skill Enhancement Course (SEC) (2)	Discipline Specific Elective (DSE) (4)	Generic Elective GE (2)
1st	English/ MIL-1	(English/ MIL Communication) / Environmental Science			
	Physical Geography (GEOGP 101 CC)				
	DSC-2A				
	English/ MIL-1	Environmental Science/ (English/ MIL Communication)			
	General Cartography (Practical) (GEOGP 102 CC)				
	DSC-2B				
2nd	English / MIL-2		Regional Planning and Development (GEOGP 203 SEC)		
	Human Geography (GEOGP 201 CC)				
	DSC-2C				
	English /MIL-2				
	Environmental Geography (GEOGP 202 CC)				
	DSC- 2D				
3rd			Geographic Information System (Practical) GEOGP 301 SEC)	Geography of India (GEOGP 303-1 DSE) Or Economic Geography (GEOGP 303-2 DSE)	Disaster Risk Reduction (GEOGP 305-GE 1)
			Field Techniques and Survey based Project Report (Practical) (GEOGP 302 SEC)	Disaster Management (GEOGP 304-1 DSE) Or Geography of Tourism (GEOGP 304-2 DSE)	Sustainability and Development (GEOGP 306-GE 2)

PHYSICAL GEOGRAPHY (GEOGP 101 CC)

Unit	Topic	विषय
I	<ul style="list-style-type: none"> <input type="checkbox"/> Introduction, Definition and Scope <input type="checkbox"/> Brief Introduction of Solar System <input type="checkbox"/> Origin of the Earth: Tidal Theory of Jeans and Jeffreys and Big Bang Theory <input type="checkbox"/> Rocks: Classification and Their Characteristics 	<ul style="list-style-type: none"> <input type="checkbox"/> भूगोल एवं भौतिक भूगोल का परिचय <input type="checkbox"/> सौर परिवार का परिचय <input type="checkbox"/> पृथ्वी की उत्पत्ति सम्बन्धी सिद्धान्त <input type="checkbox"/> चट्टानें एवं उनका वर्गीकरण
II	<ul style="list-style-type: none"> <input type="checkbox"/> Lithosphere, Internal Structure of Earth <input type="checkbox"/> Theory of Plate Tectonics <input type="checkbox"/> Weathering- Definition, Factors and Types <input type="checkbox"/> Fluvial Cycle of Erosion – Davis 	<ul style="list-style-type: none"> <input type="checkbox"/> पृथ्वी की आंतरिक संरचना <input type="checkbox"/> भू-प्लेट विवर्तनिकी <input type="checkbox"/> अपक्षय <input type="checkbox"/> अपरदन चक्र की संकल्पना
III	<ul style="list-style-type: none"> <input type="checkbox"/> Atmosphere, Structure and Composition of Atmosphere, Heat Balance <input type="checkbox"/> Pressure and Wind Systems <input type="checkbox"/> Origin of Tropical Cyclones, Monsoon <input type="checkbox"/> Climatic Classification (Koppen) 	<ul style="list-style-type: none"> <input type="checkbox"/> वायुमण्डल <input type="checkbox"/> वायुमण्डलीय दाब एवं पवनें <input type="checkbox"/> चक्रवात <input type="checkbox"/> जलवायु का वर्गीकरण
IV	<ul style="list-style-type: none"> <input type="checkbox"/> Hydrosphere, Hydrological Cycle <input type="checkbox"/> Bottom Relief Features of Pacific Ocean <input type="checkbox"/> Tides <input type="checkbox"/> Currents 	<ul style="list-style-type: none"> <input type="checkbox"/> जलीय चक्र <input type="checkbox"/> विभिन्न महासागरों के नितल उच्चावच <input type="checkbox"/> ज्वारभाटा एवं तरंगें <input type="checkbox"/> महासागरीय धाराएं

PHYSICAL GEOGRAPHY (GEOGP 101 CC)

Text Book in English Medium:

- Husain M., 2002: Fundamentals of Physical Geography, Rawat Publications, Jaipur.
- Monkhouse, F. J. 2009: Principles of Physical Geography, Platinum Publishers, Kolkata.
- Strahler A. N. and Strahler A. H., 2008: Modern Physical Geography, John Wiley & Sons, New
- Singh, Savindra : Physical Geography

पाठ्य पुस्तकें हिंदी माध्यम में:

- सविंद्रा सिंह : भौतिक भूगोल
- पी० के० सलारिया : भौतिक भूगोल
- विजय ठाकुर : भौतिक भूगोल

- INTRODUCTION

- भौतिक भूगोल का परिचय

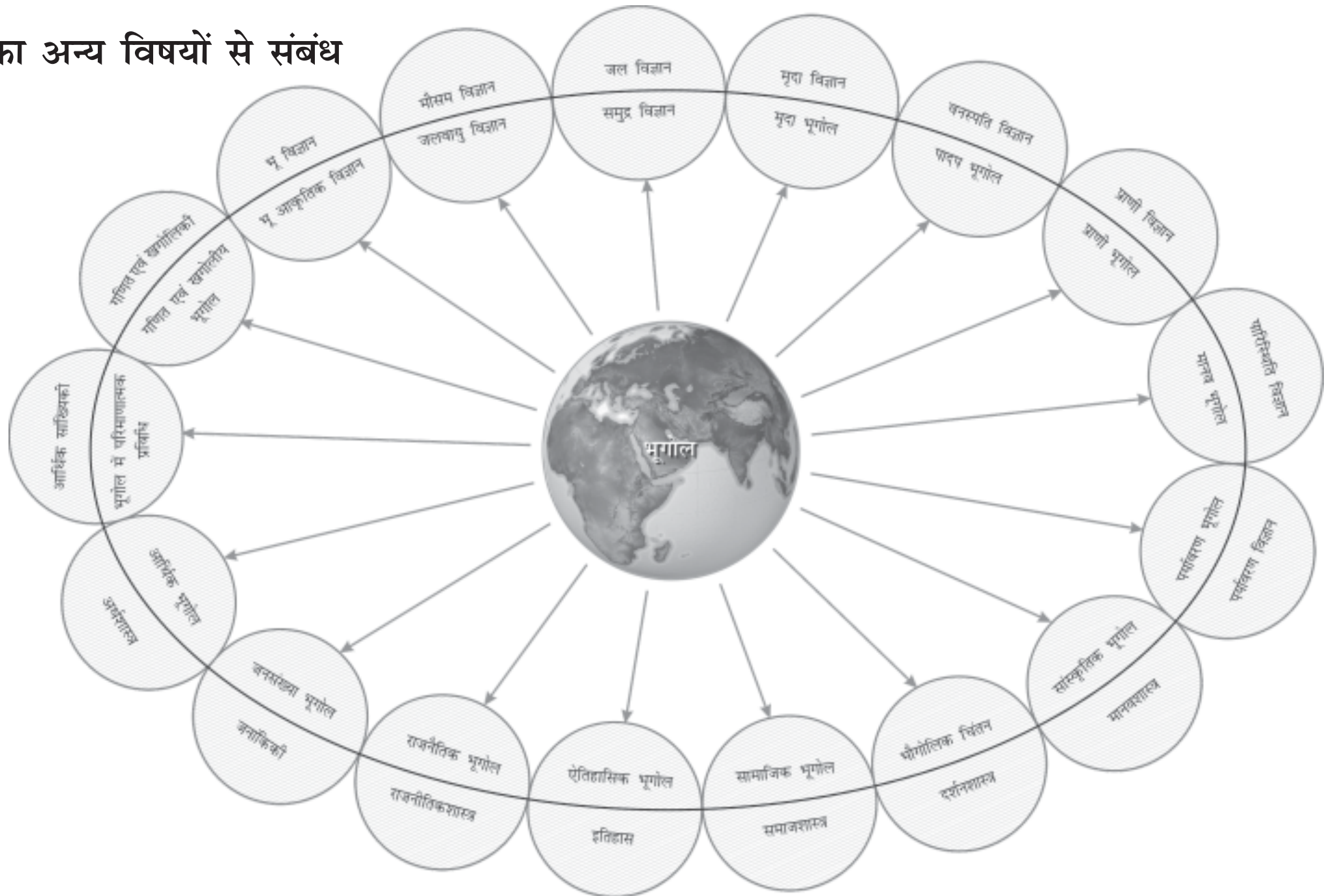
- DEFINITION

- परिभाषा

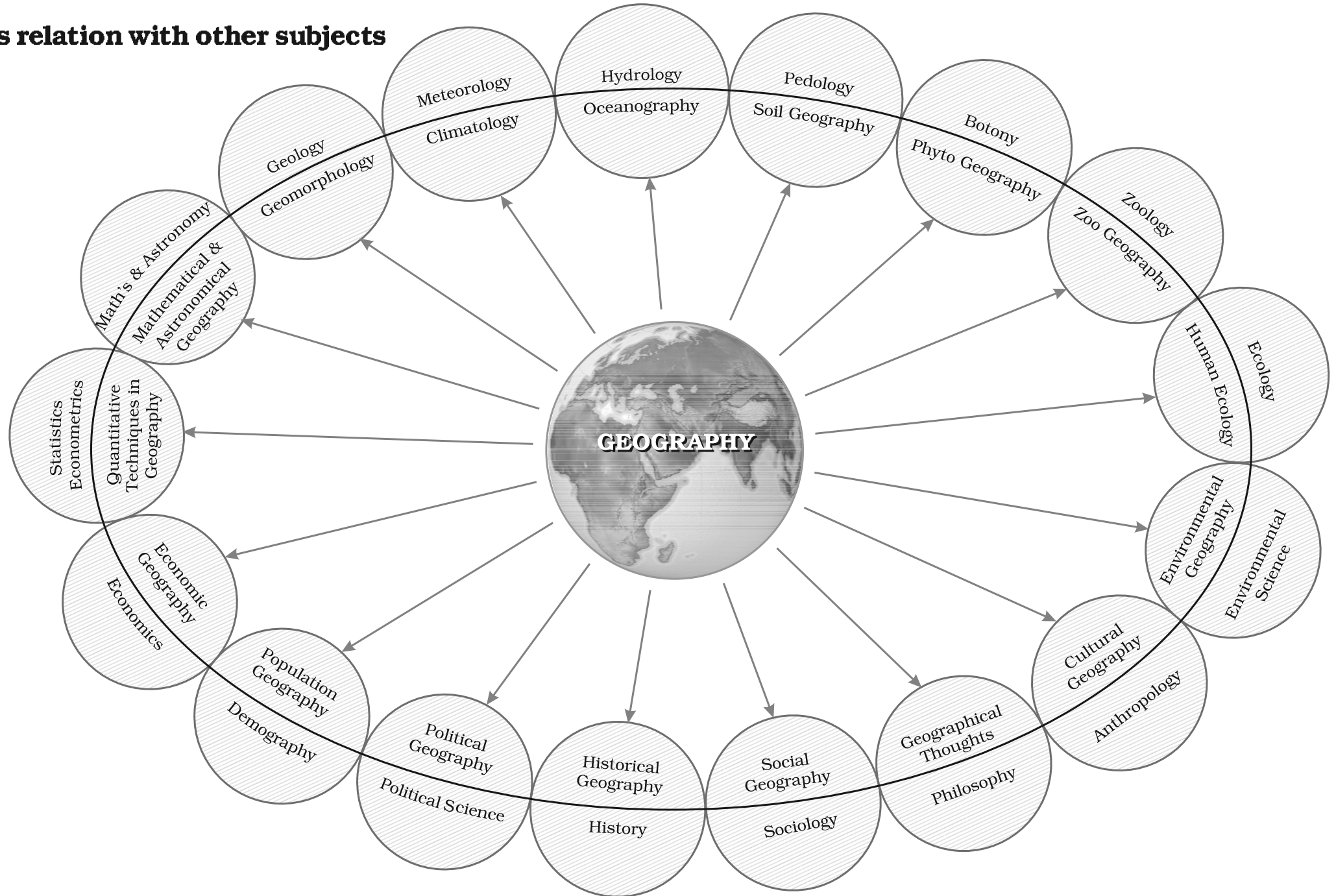
- SCOPE OF PHYSICAL GEOGRAPHY

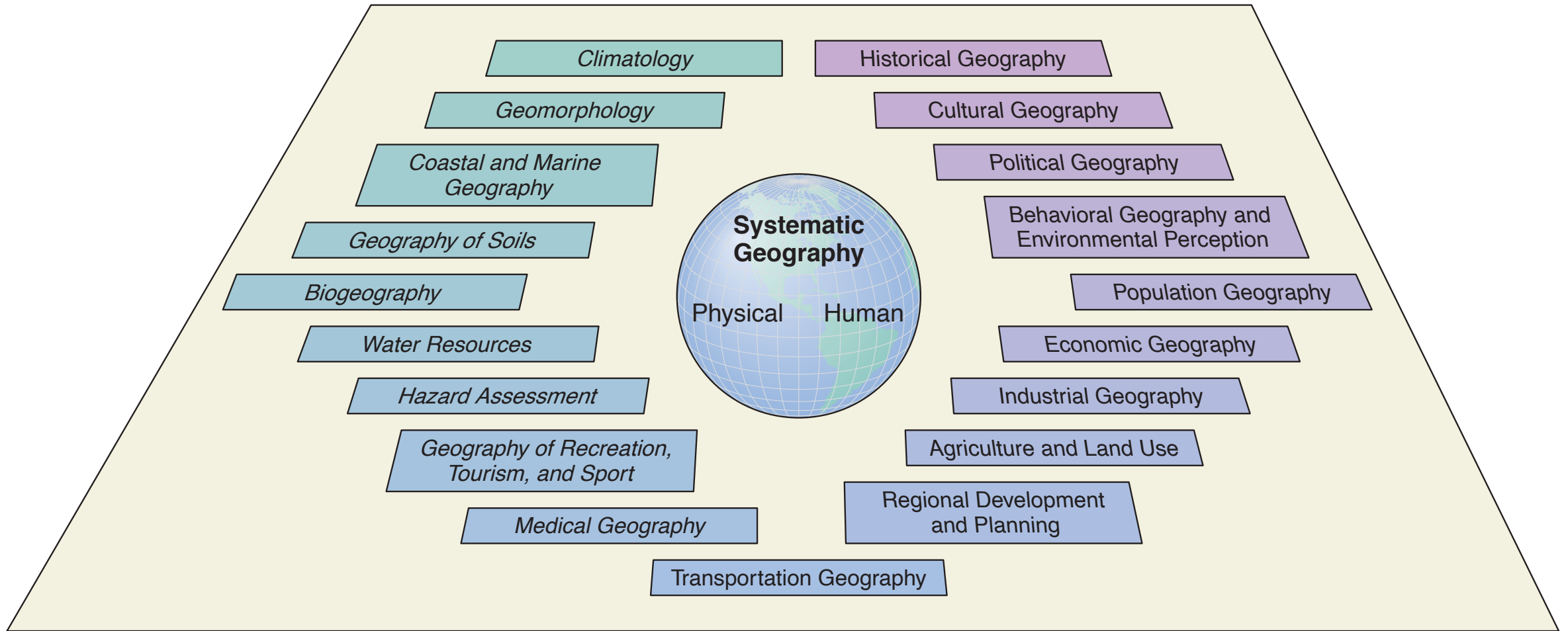
- भौतिक भूगोल का अध्ययन क्षेत्र या विषय सामग्री

भूगोल तथा इसका अन्य विषयों से संबंध



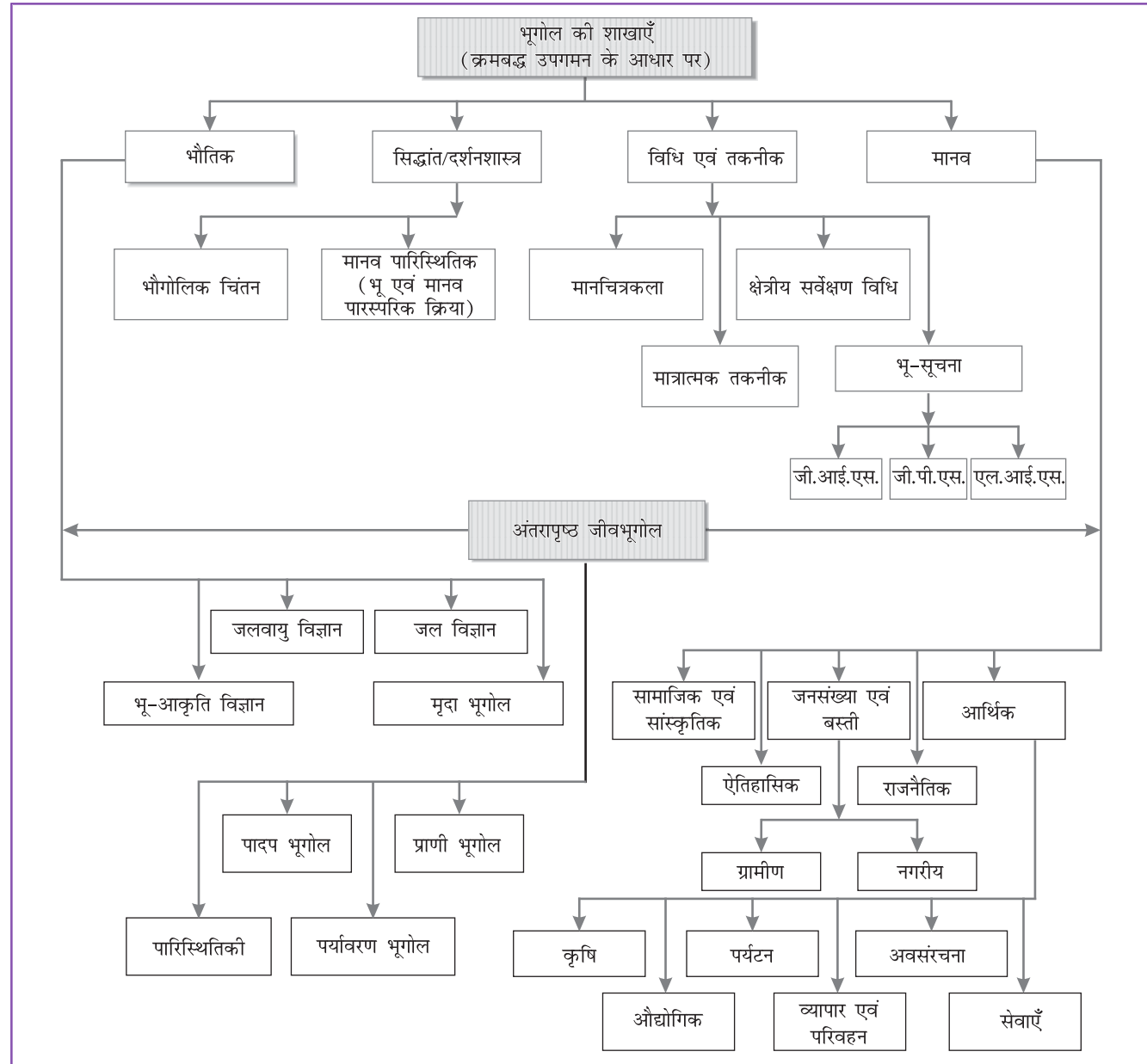
Geography and its relation with other subjects



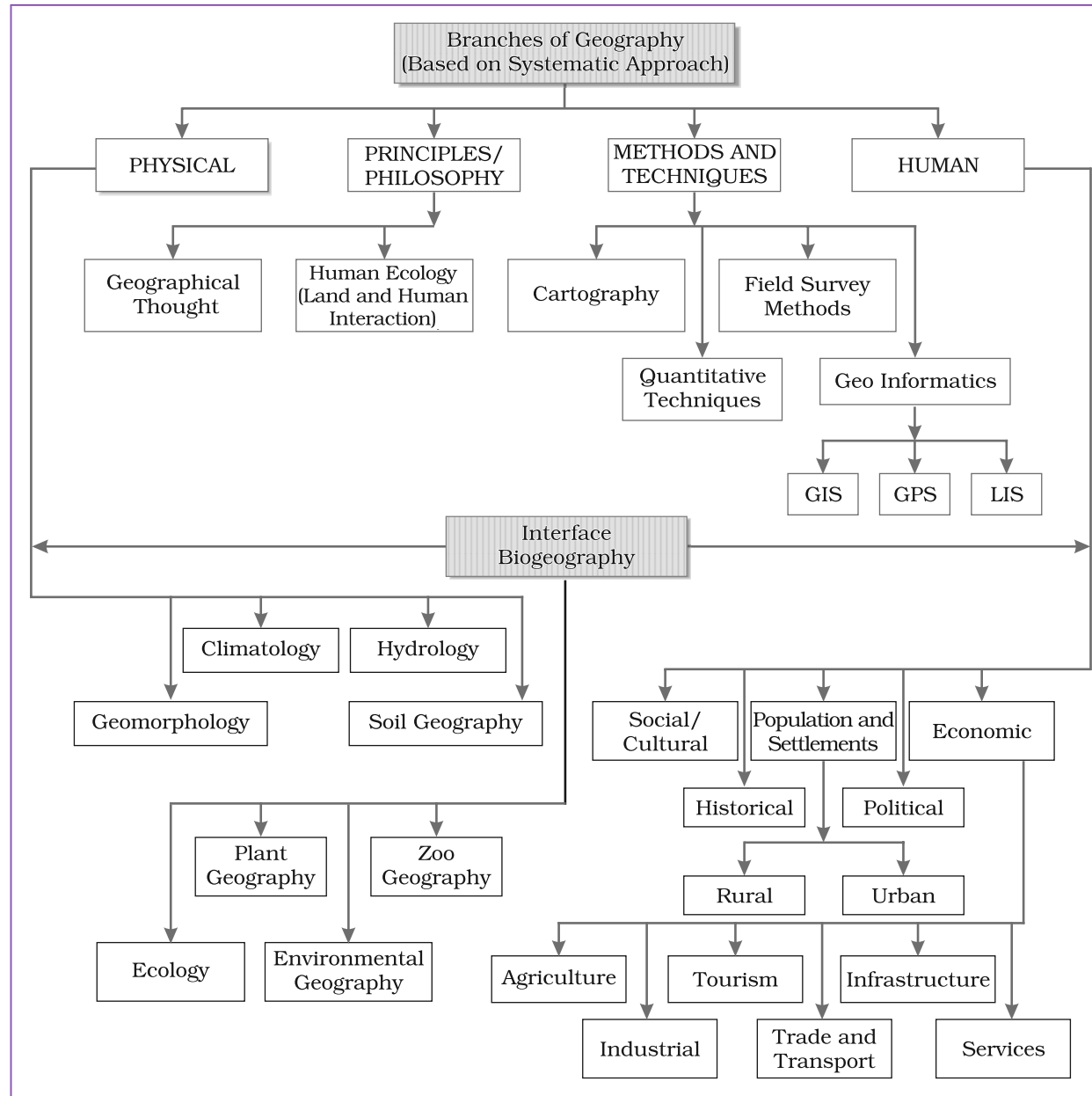


I.3 Fields of systematic geography

भूगोल की शाखाएँ (क्रमबद्ध उपगमन के आधार पर)

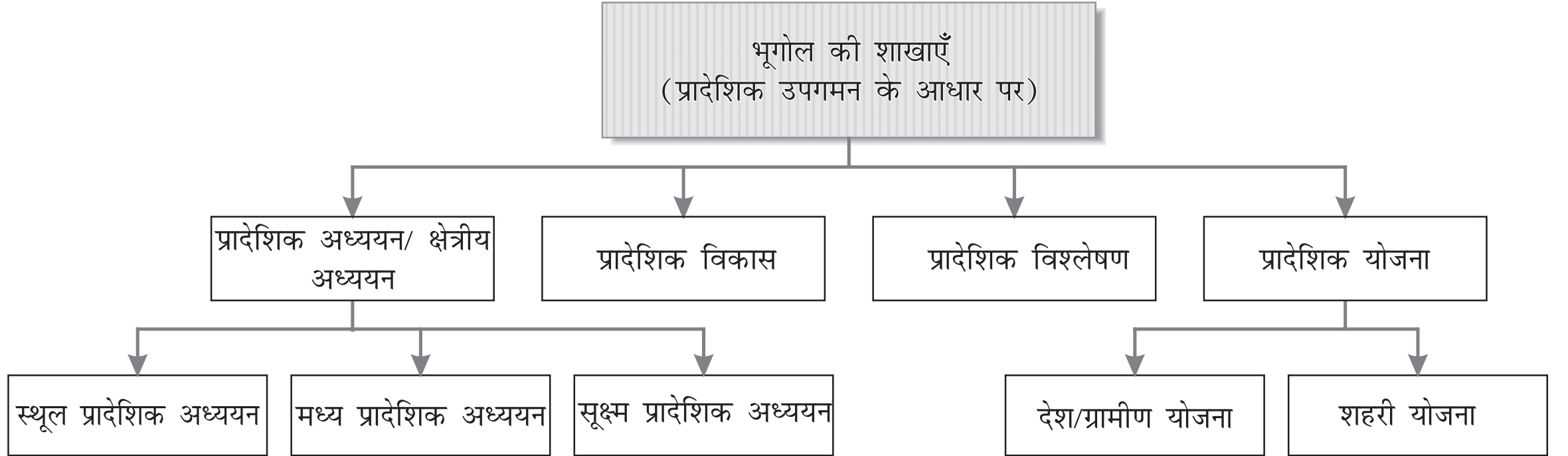


Branches of geography based on systematic approach



Branches of geography based on systematic approach

भूगोल की शाखाएँ (प्रादेशिक उपगमन के आधार पर)



भूगोल क्या है?

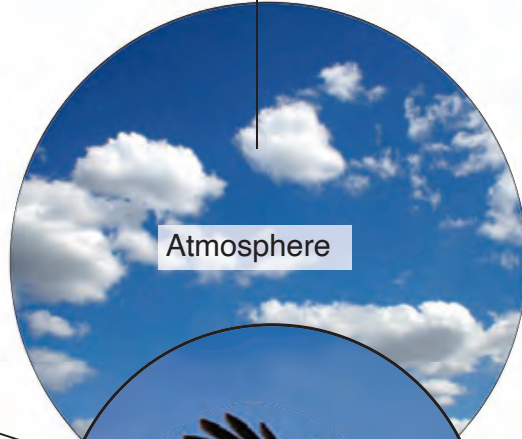
भूगोल का उद्देश्य धरातल की प्रादेशिक/क्षेत्रीय भिन्नता का वर्णन एवं व्याख्या करना है।

रिचर्ड हार्टशोर्न

भूगोल धरातल के विभिन्न भागों में कारणात्मक रूप से संबंधित तथ्यों में भिन्नता का अध्ययन करता है।

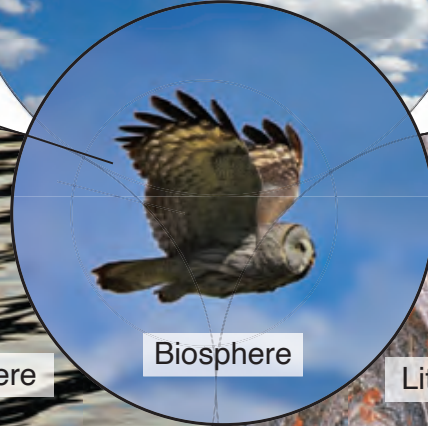
अल्फ्रेड हैटनर

The gaseous envelope that surrounds the Earth's surface



Atmosphere

The living organisms of Earth, largely found near the land and water surface

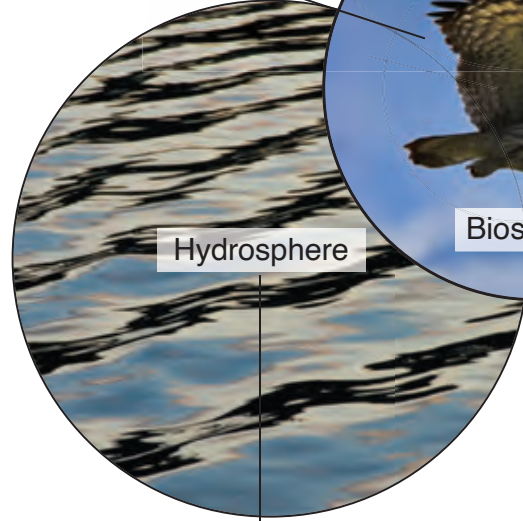


Biosphere

Minerals, rocks, and the vast, moving plates of the Earth's crust



Lithosphere



Hydrosphere

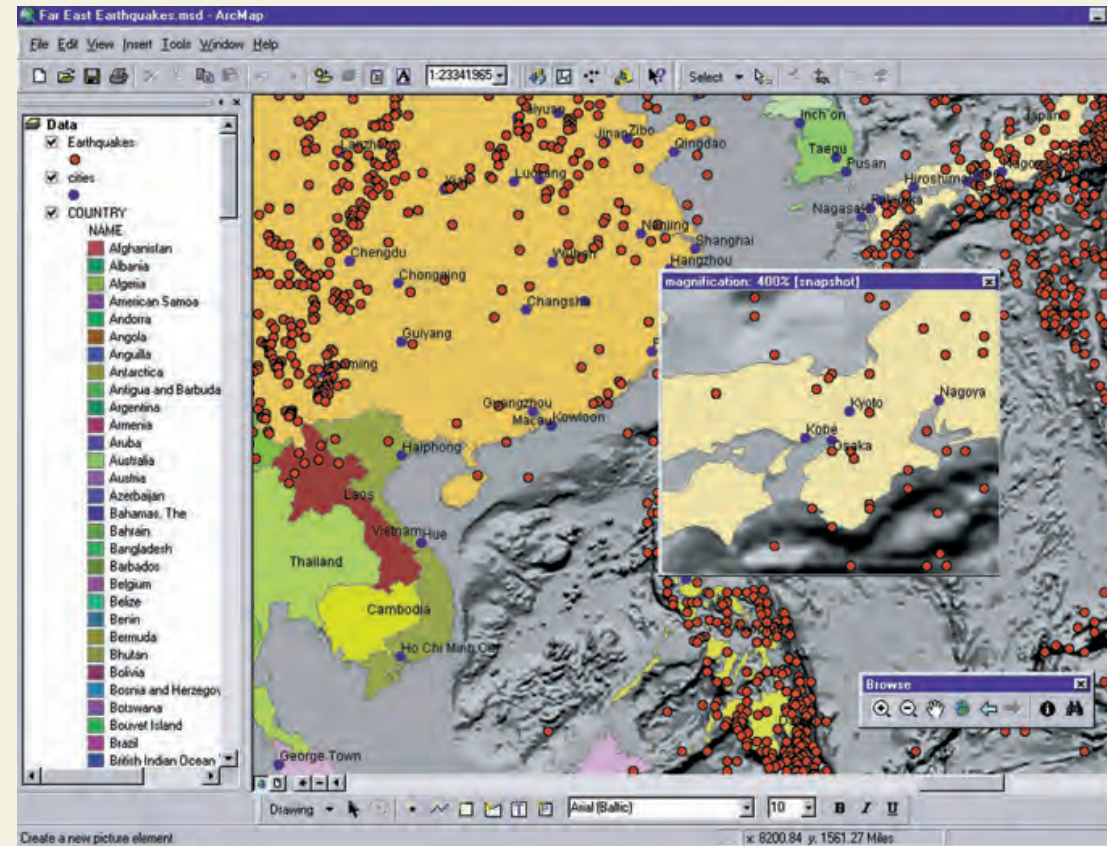
Water in the world's oceans, as fresh water on the land, and as vapor and clouds in the atmosphere

I.9 Tools of Physical Geography

Geographers rely on specialized tools to analyze spatial data.



▲ **Cartography** A portion of the U.S. Geological Survey 1:24,000 topographic map of Green Bay, Wisconsin. Using symbols, the map shows creeks and rivers, a bay, swampy regions, urban developed land, streets, roads, and highways.



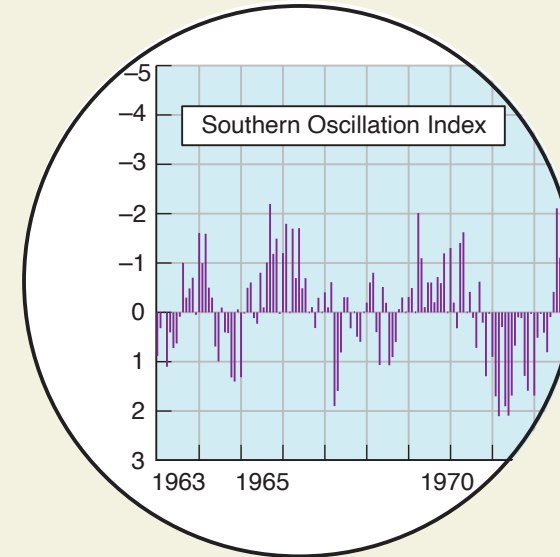
▲ **Geographic information systems (GIS)** Computer programs that store and manipulate geographic data are essential to modern applications of geography. This screen from the ARCInfo GIS program package shows earthquake centers in eastern Asia superimposed on a political map underlain by a shaded relief map of undersea topography.

▼ **Remote sensing** Remote sensing includes observing the Earth from the perspective of an aircraft or spacecraft. Wildfires on the Greek island of Peloponnesos, seen in a Landsat image from July 2000, are an example.

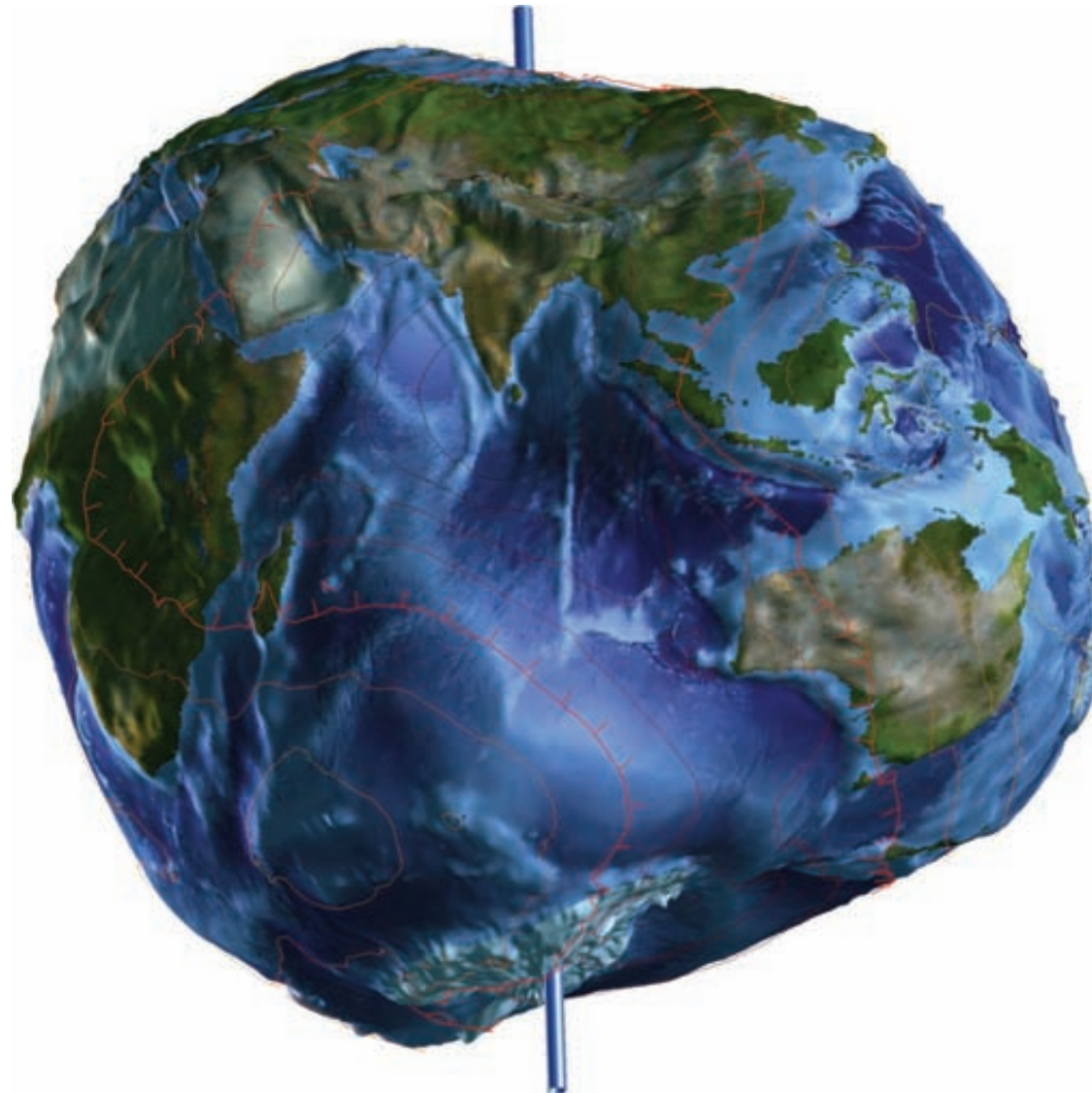


$$\begin{aligned} M &= e^{(R T)} \\ &= e^{(0.04 20)} \\ &= 2.718^{0.80} \\ &= 2.26 \end{aligned}$$

◀ **Mathematical modeling** By describing a phenomenon using a mathematical model, a geographer can predict outcomes and examine “what-if” scenarios. These equations demonstrate the calculation of an exponential growth factor.



▲ **Statistics** Statistical tools, such as this graph, allow the exploration of geographic data to determine trends and develop mathematical models. The plot shows the value of the Southern Oscillation Index, an indicator of El Niño conditions.



1.2 The geoid

Pictured here is a greatly exaggerated geoid, in which small departures from a sphere are shown as very large deviations.