

Exam 2 Study Guide GEOG 141 Where? What? Why?

Refer to all class notes, TEXT BOOK readings and diagrams

Chapter 5. Humidity – relative and specific

Creation of dew, frost evaporation fog; radiation fog

Advection Fog

Types of Cloud forms; Know where types of clouds are found (low, med high altitude or combination).

Air-mass definition. Types of air masses (cT, cP mT cT) and be able to locate on a map.

Air mass modification (how and why air masses change character).

4 Mechanisms for Atmospheric lifting (text). Be able to list and briefly explain ALL of them and give examples.

Chapter 6 Hydrologic Cycle figure

Surface Water and Groundwater pathways (hydrologic cycle model)

See Annual River runoff maps p. 205 DOES IT MAKE INTUITIVE SENSE?

Infiltration Percolation Evaporation + Transpiration = Evapotranspiration

What type of Biome has greatest and least transpiration?

Precipitation patterns in recognized in US (not numbers)

100th Meridian and what is the significance?

Hydrologic Storage

Hygroscopic water; Gravitational water; Capillary water

Surface tension; Field capacity; wilting point;

Ground water Storage and terminology: Porosity Permeable Impermeable

Zone of saturation Aquifer Water table Cone of depression Aquiclude Confined aquifer Spring
Artesian well Drafting Recharge

Size and shape of material is important to porosity and speed of movement in an aquifer.

Ground water map showing consolidated, unconsolidated and mixed types

Effluent Conditions (gaining stream) Influent Conditions (losing stream)

Sectors of water usage by society = agriculture ,domestic, industry. Since environmental movement natural waters for fish and plants are now being included. Video: Gaslan

Chapter 7

Climate vs. weather

Climate classification 2 types: 1) Empirical 2) Genetic

Global climate patterns

Climographs – what information is on them?

Know distinctive characteristic and general locations of:

Tropical Rain Forest climate	Tropical monsoon Climate
Tropical Savannah Climate	Humid Sub-tropical Climate
Mediterranean Climate	Humid Continental Climate
Sub-Arctic Climates	Desert Climates
Steppe Climates	

Understand the genetic reasons behind their location and understand the **basic biomes** and their characteristics. What do vegetation and plant communities have to do with climate?

You will be asked to match climographs to the climate types. The names will be listed and the climographs will be copied direct from the text for you to match up.

MAP Questions: Mountain ranges drawn and labeled.

You will be asked to use genetic classification using critical thinking to

determine conditions of particular locations on a map. I will offer students several locations by a dot on the map. You will write about two. Tell me (what) climate conditions are like, and why (cause/effect). To do this review your knowledge of 1) ocean basin **surface currents** 2) prevailing **wind direction**, 3) types of **air masses**, *continental or marine*, polar or tropical 4) **Latitude** 5) **ITCZ** location and shift **cloud cover** 6) **Subtropical high** location, 7) **seasonality**; seasonal patterns such as 4 distinct seasons, short summers, long winters and micro spring and fall seasons or distinctive wet/dry seasons or always wet or always dry with no real seasons apparent. (why) 8) **mountain ranges** (topography)) , **rain shadow** 9) **elevation** and other pertinent information from Ch 2-7 that will help answer this question.

I give points for critical thinking and using/explaining variables and concepts in your writing about the climate conditions. That you label the climate correctly is irrelevant to this question.

