

PHYSICAL GEOGRAPHY ESSAY

As a review of the first section of the course you will now synthesize the material learned to produce a complete essay explaining seasonal changes on earth. You should refer to all of the variables covered throughout section one and progress through the topic in a logical, sequential, step-by-step manner.

Course concepts should not solely be defined or explained; instead you should use them to build towards a “big picture” explanation of seasons in San Diego (i.e. the variables should systematically lead to a justification for the seasonal unequal energy distribution on earth). Be sure to relate one topic to the next illustrating causation (if done correctly you’ll probably be using words such as: “results in” “explains why” “causes” “leads to” and of course the ever present word ENERGY should certainly appear throughout). *To help you get started and to ensure you include all the necessary components a detailed outline prompt has been provided.*

Your paper will be graded based upon your full explanation of the individual concepts and overall explanation as well as grammar, syntax, and organization. It must be 2 pages in length; standard formatting applies (double spaced, 12 point font, one inch margins).

DISTRIBUTION

Explanation of Concepts	11 points	55%
Organization and Development	5 points	25%
Grammar and Syntax	4 points	20%
TOTAL	20 points	100%

**FOR A DETAILED ACCOUNT OF EXPECTATIONS AND ASSESSMENT SEE THE GRADING RUBRIC
ON THE NEXT PAGE**

GRADING RUBRIC

	UNACCEPTABLE	ACCEPTABLE	ABOVE AVERAGE
USE AND EXPLANATION OF CONCEPTS	Few concepts are mentioned; concepts are not fully explained; many inaccuracies or lack of integration	Missing at most 2 concepts; a few ideas are not fully developed or not accurately explained; most ideas “build”/are integrated	All above concepts are fully and accurately explained and well integrated into the paper
ORGANIZATION and DEVELOPMENT	Unorganized; no structure; ideas do not build to/ culminate with a well rounded explanation	Some connections between ideas and topic explained sufficiently overall	All concepts are tied together and progress in a step by step well developed manner culminating in a complete “big picture” as well as well explained individual parts.
GRAMMAR and SYNTAX	4 or more errors; paper is confusing or unreadable	1-3 errors including spelling, grammar or syntax	No errors; no wording issues; no confusion

Essay Prompt

A very basic potential outline to help organize the paper and fully explain seasons on Earth; start here and explain each to construct a full paper.

OUTLINE

I. Introduction

- A. Earth-Sun relationship
 - i. Revolution, tilt and fixed axis
 - ii. Declination and Insolation variation

Begin with a very brief introduction; explain how the topics covered are related

II. Energy Distribution

- A. Earth Sun relationship
 - i. Revolution
 - ii. Axial inclination
 - iii. Axial Orientation
- B. Resulting Solar Declination
 - i. Annual migration of solar declination
- C. Resulting Insolation Variation
 - i. Sun angle
 - ii. Day length

Explain how the E-S relationship results in the daily changing solar declination

Explain cause/effect relationship between changing solar declination and insolation variation (*i.e. as declination changes what are the results for sun angle and day length and thus total insolation*)

III. Conclusion

- A. Seasonal variation
 - i. Insolation vs. Terrestrial outgoing radiation
 - ii. Annual changes in net radiation (seasons)

Clearly show the relationship: starting with solar declination, leading to insolation variation and ultimately resulting in differing net radiation and temperatures (in other words seasons)