

# Geography 101---- The Natural Environment

03

TR: 9:45am – 11:00am (CRN: 62101)

MW: 1:30am – 2:45pm (CRN: 62102)

**INSTRUCTOR:** Toshi Ikagawa, Ph.D.  
**OFFICE:** Na'auao 116  
**OFFICE HOURS:** MTWR: 11:30 a.m. – 1:00 p.m.  
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**EFFECTIVE DATE:** Fall 2009

## WINDWARD COMMUNITY COLLEGE MISSION STATEMENT

*Windward Community College is committed to excellence in the liberal arts and career development; we support and challenge individuals to develop skills, fulfill their potential, enrich their lives, and become contributing, culturally aware members of our community.*

## CATALOG DESCRIPTION

Survey of the natural environment; distribution and interrelationships of climates, vegetation, soil and land forms.

## Activities Required at Scheduled Times Other Than Class Times

None

## STUDENT LEARNING OUTCOMES

At the completion of the course, the student should learn to:

1. Describe the components (inputs), processes (actions) and resulting spatial patterns (outputs) of the physical environment (atmosphere, hydrosphere, lithosphere and biosphere) as a **system**.
2. Apply the **scientific method**, and **theories** and **concepts** of geography to explain a physical environment.
3. Explain critically the **interaction** of humans and the physical environment.
4. Illustrate how his/her **views** of the physical environment have (or have not) changed.

## REQUIREMENTS COURSE SATISFIES

- At WCC:** Meets AA degree physical science requirement of the Natural Science requirements; with GEOG 101L, meets science laboratory course requirement. Also full fill marine related elective requirement of the [Marine Option Program](#) (MOP)
- At UHM:** Meets Natural Science general education requirements (DP); with GEOG 101L, meets science laboratory course requirement (DY).

## RECOMMENDED BASIC SKILLS LEVEL

Ability to read and write at a college level

## LEARNING RESOURCES

**Required Textbook:** [Geography 101 Book](#) (Online Textbook) by Dennis Nullet

This textbook can be accessed at: <http://www2.hawaii.edu/%7Edennis/book/>

User ID: geog101  
Password: panda

## COURSE TASKS

**Dear Geography Students:**

Welcome to the Geography 101 course, [The Natural Environment](#). This class examines the Earth's Natural Environment. The structure and processes of major environments will be discussed.

**Assignments:**

It is assumed that you read and understand all the assigned part of the textbook **before** each class period (see the class schedule attached). During and after each class you will write a **learning log** which will be counted toward your final grade. There may also be non-prescheduled pop-quizzes and/or assignments in any classes, which will be counted toward your final grade.

**Attendance/participation:**

**Attendance** is mandatory, and presence/absence will be evaluated by roll call (signup sheet) and **participation** is evaluated by class participation and learning logs. It is assumed that you know and understand all the materials covered in all lectures (part of which may not be covered in the textbook).

Also, any changes in the content/material/schedule/procedure related to the class, announced during any class period will stand, even if you are not there. It is your responsibility to obtain such information from your classmate or any other sources, if you miss any lectures.

## ASSESSMENT TASKS AND GRADING

### Student Evaluation:

There will be two **midterm exams** (25% of the total grades each), one **final exam** (30% of the total grades), and **attendance/participation** (20% of the total grades) for the evaluation.

### IMPORTANT NOTE:

**Participation** (via learning logs) will be used to evaluate each student's achievement of course objectives listed above, especially #3: Be able to assess the interaction of humans and the physical environment; and #4: Be motivated to inquire further into physical geography.

Because these learning logs are record of class participation and will be done in class, students missing class regularly (i.e. more than 10% of classes), thus missing learning logs, cannot be assessed for these objectives and therefore will **not** be able to pass the course.

### Please mark your calendar now.

Exams	Material Covered	Date
Midterm 1	Multiple choice questions for Textbook: Chapters 1–4	5-6th weeks on <a href="#">Laulima</a>
	Essay questions	7th week
Midterm 2	Multiple choice questions for Textbook: Chapters 5–8	10-11th weeks on <a href="#">Laulima</a>
	Essay questions	12th week
Final	Multiple choice questions for Textbook: Chapters 9–12	15-16th weeks on <a href="#">Laulima</a>
	Essay questions	17th week: <b>Check the <a href="#">schedule!</a></b>
<b>Learning logs</b>		Due at the end of each class

**NOTE:** Exams cover both lectures and the textbook. It is mandatory to attend all the lectures. Each exam includes (1) multiple-choice questions, including true/false questions and (2) any possible essay type questions. When you study, it is strongly recommended to check ideas and concepts using the textbook. Review questions for multiple choice questions are available on [Laulima](#). Review questions for essay questions will be distributed via the Intranet (M:\Courses\Geography\GEOG 101)\[Internet](#).

### How to access [Laulima](#)

1. Go to the [Laulima](#) entry page at:

<https://laulima.hawaii.edu/portal>

2. Log in using your UH Banner ID and password.
3. Select the class from the “**My Workspace**” bar near the top and click.
4. On the left side, there is the table of contents (Home, Syllabus, Tests & Quizzes, Resources, etc.). Click to access.

**NOTE:** Review questions are accessible from any computers which have the Internet access. You can try the review questions as many times as you wish. However, the **exams** can be only accessible at The Learning Center (TLC) during the [designated period](#). The proctor at TLC will enter password for you. You can take each exam **ONLY** once.

**!** At the moment of Start Date (& time) of an exam, the corresponding WebCT review page will **close** (only the Word version will remain open).

**Academic dishonesty:** (SERIOUS WARNING!!)

Academic dishonesty such as cheating and plagiarism that may occur in this class will be severely punished. It most likely will result in immediate dismissal from the class. In other words, “DON’T DO IT” even if you have noble reasons to do so. It is NOT worth a try it in this class.

**Grading uses the standard scale:**

A: 90.0-100.0%, B: 80.0-89.9%; C: 70.0-79.9%, D: 60.0-69.9%, F: 0-59.9%.

For Cr/NC options, Incomplete (“I” grade), and “W” grade, see the WCC College Catalog.

There is no “N” grade in this class.

**NOTE:**

1. There is NO extra credit work.
2. Make-up exams will be all essay type.

## COURSE CONTENT

### The Natural Environment (GEOG 101) Schedule

#### Subjects (Reading assignment of Textbook)

#### WEEK 1

##### INTRODUCTION

1. Introduction (Preface), Scientific method, systems approach
2. Organizing concepts, Geographic grid system (Chapter 1: Maps)
3. Maps and map projections, map scales

#### WEEK 2

##### PART 1: ATMOSPHERE

4. Overview of atmosphere (Chapter 2: Sky): Solar system, solar radiation

5. Seasons, analemma, composition of atmosphere, profiles of atmosphere

### WEEK 3

6. Energy and temperature (Chapter 3: Heat): Heat transfer, transmission, radiation balance, land-ocean contrast

### WEEK 4

7. Pressure and winds (Chapter 4: Wind): Pressure gradient, high/low pressures & winds, land/sea breezes, Coriolis
8. Global circulation, real winds, ocean currents, monsoon

### WEEK 5

#### PART 2: HYDROSPHERE

9. Moisture and precipitation (Chapter 5: Clouds): Atmospheric moisture, phase change, humidity
10. Ground level condensation

### WEEK 6

11. Clouds and storms (Chapter 6: Weather): Clouds
12. Orographic rainfall, adiabatic process, convictional rifting, precipitation types
13. Air masses & mid-latitude cyclones, thunderstorms, tornadoes, hurricanes vs mis-lat cyclone

### WEEK 7

14. **Review 1**
15. **Midterm 1 (Essay part)**

### WEEK 8

16. Climate (Chapter 7: Water): Climate classification, Hadley cell & tropical rainforest, Subtropical Highs & dry climate
17. Climate PPS, water resources

### WEEK 9

#### PART 3: BIOSPHERE

18. Biogeography and ecosystems (Chapter 8: Life): Ecosystems & food chain
19. Vegetation zones, terrestrial biomes
20. Project 3: Island Isolation

### WEEK 10

21. Soils and vegetation: soils, laterization
22. White sand and blue pine
23. *Stranger in the paradise*

### WEEK 11

#### PART 4: LITHOSPHERE

24. Plate tectonics (Chapter 9: Earth): Geologic time, Interior of the Earth
25. **Plate tectonics**
26. Minerals and rocks (Chapter 10: Mountains): Rock cycle

### WEEK 12

- 27. **Review 2**
- 28. **Midterm 2 (Essay part)**

### **WEEK 13**

- 29. Tectonic processes, faulting & folding
- 30. Building/decreasing processes (Chapter 11: Valleys), volcanism, shield volcano, weathering, karst landscape
- 31. *Nature's Fury*

### **WEEK 14**

- 32. Fluvial landscapes (Chapter 12: Erosion)
- 33. Wind, sand dunes
- 34. Project 1: Dead Sun

### **WEEK 15**

- 35. Ocean, glacier landscapes
- 36. *Born of Fire*
- 37. Project 2: 10 Acres

### **WEEK 16**

- 38. **Summary**
- 39. **Review 3**

### **WEEK 17**

- 40. **Final Exam (Essay part)**

NOTE: Schedule/subjects may change without prior notice.

### **Disabilities Accommodation Statement**

If you have a physical, sensory, health, cognitive, or mental health disability that could limit your ability to fully participate in this class, you are encouraged to contact the Disability Specialist Counselor to discuss reasonable accommodations that will help you succeed in this class. Ann Lemke can be reached at 235-7448, [lemke@hawaii.edu](mailto:lemke@hawaii.edu), or you may stop by Hale 'Akoakoa 213 for more information.

### **Additional Information**

#### **Legal assumptions:**

It is hereby assumed that you will strictly follow all and any reasonable procedures/ethics, etc. that are enforced in this academic institution.