Geography 101---- The Natural Environment

TR: 1:00 p.m. – 2:15 p.m. (CRN: 62126)

INSTRUCTOR: Toshi Ikagawa, Ph.D.
OFFICE: Na‘auao 127
OFFICE HOURS: TR: 11:30 a.m. – 1:00 p.m.
TELEPHONE: 236-9216; ikagawa@hawaii.edu
EFFECTIVE DATE: Fall 2014

WINDWARD COMMUNITY COLLEGE MISSION STATEMENT

Windward Community College offers innovative programs in the arts and sciences and opportunities to gain knowledge and understanding of Hawai‘i and its unique heritage. With a special commitment to support the access and educational needs of Native Hawaiians, we provide O‘ahu’s Ko‘olau region and beyond with liberal arts, career and lifelong learning in a supportive and challenging environment — inspiring students to excellence.

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

Taking quizzes at a testing center

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.

UH E-MAIL

Occasionally, a rush message is disseminated via the UH e-mail. Please check your UH e-mail often. Useful information is available at the following:

Forwarding Your UH Mail to Another Email Account
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 fulfill 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; math at college level

LEARNING RESOURCES

1. 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: Available on the Home page on Laulima

2. Required Work Book: GEOG 101: The Natural Environment, Semester Work Book (Available at WCC Bookstore); also available on the Laulima Resources page

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 complete a Work Book exercise (or equivalent) 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 work book exercises (or equivalent). 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). Note that “attend a class” means come on time and stay until dismissed.

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:**

1. You must complete the **Pre Survey** during the first two weeks of the semester (extra points, and mandatory). Go to a Testing Center and open the Tasks, Tests and Surveys page from [Laulima](#). Open **101-Pre-Survey** (30 questions) and answer the questions (The Proctor at the Testing Center will put in the Password for you).

   **Requirement 1:** You must complete (1) **Pre-survey**. If you do not complete this initial task, you will not be allowed to participate in this class thereafter.

2. There will be Total **270** points for the evaluation as follows:

   - **Three Exams** (60 points each) \* 3 = 180 points
   - **Chapter Quizzes** (5 points each) \* 12 = 60 points
   - **Participation** = 30 points

Reviews for Exams are available as [Reviews for Multiple Choice Exams](#) and [GEOG 101 Key Concepts and Terms](#) (for review) on [Laulima](#). Also, review [Weekly Quizzes](#).

   **Requirement 2:** You must achieve **60%** or better of the total of exams, quizzes and attendance/participation to pass the course.

3. **Post-Survey** (Mandatory; Extra credit according to your achievement; **up to 10** points)

   **Requirement 3:** You must take the **Post-Survey**.

4. **Participation** (attendance, workbook completion and instructor's observation) will be used to evaluate each student’s achievement of course objectives listed above. Students who are missing class regularly (i.e. more than **10%** of classes), not participating in a class (i.e. just sitting), or not completing the workbook exercises (filling the missed exercises in a later date will **NOT** be considered as an acceptable participation), cannot be assessed for these objectives and therefore will **not** be able to pass the course.

   **Requirement 4:** No more than **10%** absences from classes ___ participate in classes

**Please mark your calendar now.**

<table>
<thead>
<tr>
<th>Tasks</th>
<th>Material Covered</th>
<th>Date</th>
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<tbody>
<tr>
<td>Pre-Survey</td>
<td>Multiple choice questions about the natural environment</td>
<td>1st – 2nd weeks on <a href="#">Laulima</a></td>
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Weekly Quiz: Covered Materials & Due Week

<table>
<thead>
<tr>
<th>Weekly Quiz</th>
<th>Covered Materials &amp; Due Week</th>
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<tbody>
<tr>
<td>(Ch 1–12)</td>
<td>Weekly (1st – 15th weeks)</td>
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<td></td>
<td>on <strong>Laulima</strong></td>
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<td>(NOT proctored, so you can</td>
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<td></td>
<td>take it at home)</td>
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<tr>
<td>Midterm 1</td>
<td>Multiple choice questions</td>
</tr>
<tr>
<td>(Exam #1)</td>
<td>for Textbook: Chapters 1–4;</td>
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<td>Lecture Notes 01–08;</td>
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<td>Also study <strong>Key Concepts &amp; Terms</strong></td>
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<td></td>
<td>6th–7th week</td>
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<td>on <strong>Laulima</strong></td>
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<tr>
<td>Midterm 2</td>
<td>Multiple choice questions</td>
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<tr>
<td>(Exam #2)</td>
<td>for Textbook: Chapters 5–8;</td>
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<td>Lecture Notes 09–16;</td>
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<td>Also study <strong>Key Concepts &amp; Terms</strong></td>
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<td></td>
<td>10th–11th week</td>
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<tr>
<td>Final Exam</td>
<td>Multiple choice questions</td>
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<tr>
<td>(Exam #3)</td>
<td>for Textbook: Chapters 9–12;</td>
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<td>Lecture Notes 17–24;</td>
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<td>Also study <strong>Key Concepts &amp; Terms</strong></td>
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<td>15th–16th week</td>
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<td>on <strong>Laulima</strong></td>
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<tr>
<td>Post-Survey</td>
<td>Multiple choice questions</td>
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<tr>
<td>(Mandatory)</td>
<td>about the natural environment</td>
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<td>15th–16th week</td>
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<td>on <strong>Laulima</strong></td>
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<tr>
<td>Work Book</td>
<td>Questions and exercises</td>
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<tr>
<td>Exercise</td>
<td>designed for the lecture</td>
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<td>Due at the end of each class</td>
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<thead>
<tr>
<th>Quiz #</th>
<th>Week Due</th>
<th>Chapters</th>
<th>Lecture Notes</th>
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<tbody>
<tr>
<td>#1 (Ch01)</td>
<td>1–3</td>
<td>1</td>
<td>01 &amp; 02</td>
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<td>#2 (Ch02)</td>
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<td>#4 (Ch04)</td>
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<td>07 &amp; 08</td>
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<td>#5 (Ch05)</td>
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<td>5</td>
<td>09 &amp; 10</td>
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<td>#6 (Ch06)</td>
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<td>6</td>
<td>11 &amp; 12</td>
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<td>#7 (Ch07)</td>
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<td>13 &amp; 14</td>
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<td>#8 (Ch08)</td>
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<td>15 &amp; 16</td>
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<td>#9 (Ch09)</td>
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<td>#11 (Ch11)</td>
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<td>11</td>
<td>21 &amp; 22</td>
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<td>#12 (Ch12)</td>
<td>14–15</td>
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<td>23 &amp; 24</td>
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NOTE 1: Exams cover both lectures and the textbook. It is mandatory to attend all the lectures. Each exam includes multiple-choice questions, including true/false questions. When you study, it is strongly recommended to check ideas and concepts using the textbook. (1) Key concepts and terms and (2) review questions for multiple choice questions are available in the Resources page on Laulima.

NOTE 2: Exact open and due dates of each exam are available on Tasks, Tests & Surveys page on Laulima. Exams are due at 3 p.m. of the due date, not at the time of a testing center closes.

NOTE 3: Exams cover Reviews for Multiple Choice Exams and Lecture Notes (Weekly Quizzes). It is mandatory to read all the reading materials. When you study, it is strongly recommended to check ideas and concepts using the textbook.

Both (1) Key Concepts and Terms and (2) Reviews for Multiple Choice Exams are available in the Resources page on Laulima.

NOTE 4: No personal items, including electronic device (such as a cell phone and iPad), are allowed during the proctored assignments.

NOTE 5: No reference materials, including other Laulima pages of the class, are allowed when you take proctored quizzes, etc.

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, Quizzes, Resources, etc.). Click to access.

NOTE: The survey/exams can be only accessible at a Testing Center during the designated period. The proctor at TTC will enter password for you. You can take each quiz ONLY once.

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:

1. A: 90.0-100.0%; B: 80.0-89.9%; C: 70.0-79.9%, D: 60.0-69.9%, F: 0-59.9%
2. For Cr/NC options, Incomplete (“I” grade), and “W” grade, see the WCC College Catalog.
3. There is no “N” grade in this class.

NOTE:
1. There is NO extra credit work other than the Post survey (unless announced via UH e-mail).
There are NO make-ups for missed exams.

COURSE CONTENT

The Natural Environment (GEOG 101) Schedule

Subjects (Reading assignment of Textbook & Lecture notes)

NOTE: Textbook readings are ahead of Lecture notes

WEEK 1 (Textbook Preface & Ch 1, lecture notes #01 & 02) Pre-survey

INTRODUCTION
1. Introduction (Preface), Scientific method, systems approach
2. Organizing concepts, Geographic grid system (Chapter 1: Maps)

WEEK 2 (Textbook Ch 2 and Lecture notes #03)

3. Video: NOVA: Lost at Sea
4. Maps and map projections, map scales

WEEK 3 (Textbook Ch 3 and Lecture notes #04 & 05)

PART 1: ATMOSPHERE
5. GIS/GPS

WEEK 4 (Textbook Ch 4 and Lecture notes #06 & 07)
7. Solar radiation, seasons, analemma
8. Composition of atmosphere, profiles of atmosphere

WEEK 5 (Textbook Ch 5 and Lecture notes #08 & 09)
10. Energy balance (radiation balance), land-ocean contrast

WEEK 6 (Textbook Ch 6 and Lecture notes #10) Midterm #1

11. Video: NOVA: Dimming the Sun
12. Pressure and winds (Chapter 4: Wind): Pressure gradient, high/low pressures & winds, land/sea breezes, Coriolis

WEEK 7 (Textbook Ch 7 and Lecture notes #11 & 12)

13. Global circulation, real winds, ocean currents, monsoon

PART 2: HYDROSPHERE
14. Moisture and precipitation (Chapter 5: Clouds): Atmospheric moisture, phase
change, humidity

**WEEK 8** (Textbook Ch 8 and Lecture notes #13)

15. Ground level condensation
16. Video: The Storm of the Century

**WEEK 9** (Textbook Ch 9 and Lecture notes #14 & 15)

17. Clouds and storms (Chapter 6: Weather): Cloud classification
18. Cloud formation processes, orographic rainfall, adiabatic process, convective rifting, precipitation types

**WEEK 10** (Textbook Ch 10 and Lecture notes #16 & 17) **Midterm #2**

19. Air masses & mid-latitude cyclones, thunderstorms, tornadoes, hurricanes vs mid-latitude cyclone
20. Climate (Chapter 7: Water): Climate classification, Hadley cell & tropical rainforest, Subtropical Highs & dry climate

**WEEK 11** (Textbook Ch 11 and Lecture notes #18)

**PART 3: LITHOSPHERE**

21. Plate tectonics (Chapter 9: Earth): Geologic time, Interior of the Earth, Plate tectonics
22. Video: Nature’s Fury

**WEEK 12** (Textbook Ch 12 and Lecture notes #19 & 20)

23. Minerals and rocks (Chapter 10: Mountains): Rock cycle
24. Tectonic processes, faulting & folding, earthquakes, tsunami, volcanism, shield volcano

**WEEK 13** (Lecture notes #21 &22)

25. Gradational processes (Chapter 11: Valleys), weathering, karst landscape, mass wasting
26. Fluvial landscapes (Chapter 12: Erosion), erosional processes, fluvial, glacier, coastal and wind erosions

**WEEK 14** (Lecture notes #23)

**PART 4: BIOSPHERE**

27. Biogeography and ecosystems (Chapter 8: Life): Ecosystems & food chain
28. Video: The Queen of Trees

**WEEK 15—16** (Lecture notes #24) **Final Exam/Post-Survey**

29. Summary: Exponential Age
30. Preparation for the Capstone exam
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, 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. Refer to the Student Conduct Code (http://www.hawaii.edu/apis/ep/e7/e7208.pdf) for the details.

NOTE 1: No personal items, including electronic device (such as a cell phone and iPad), and eCigarette are allowed during the class period.