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 global environment lab. Analysis of the natural environment through field and laboratory observations/experiments. Emphasis on Hawai‘i and on human modification of the environment.

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. **Apply the scientific method** to study a physical environment: Define a problem for a study, gather and record data, analyze the data, arrive at appropriate conclusions, and report the findings in written form.

2. **Use various instruments**, such as a compass, GPS unit and thermometer, to gather environmental data.

3. **Use the metric system**, scientific notation, graphs, and geographic and basic statistical measurements.

4. **Write a lab report** using the standard scientific format.
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*  
(http://windward.hawaii.edu/facstaff/ikagawa-t/Forwarding%20your%20UH%20Mail.pdf)

REQUIREMENTS COURSE SATISFIES

At WCC: Meets natural science laboratory course requirement 
Bio-Resources Development & Management Certificate

At UH Manoa: Meets DY requirement

PREREQUISITES/COREQUISITES

GEOG 101 (The Natural Environment)

RECOMMENDED BASIC SKILLS LEVEL

Ability to read and write at a college level; math at college level

LEARNING RESOURCES

Required Lab manual: *The Natural Environment Lab* by Dennis Nullet. (Online Manual;  
available on Laulima site)

Recommended Textbook: *Geography 101 Book* (Online Textbook) by Dennis Nullet.  
This textbook can be accessed at the following site:

https://laulima.hawaii.edu/access/content/group/2c084cc1-8f08-442b-80e8-ed89faa22c33/book/index.html

Required Materials:

1. **Digital infrared (IR) thermometer** to be used for two labs  
(Lab 5 & 6).

Typically, they measure temperatures in a range of about -50 °C to 400 °C. You can purchase one from an online seller like Amazon.com for around $15. If you prefer, you can usually find an IR thermometer at a local hardware store, but it will cost around $40. A laser pointer feature is not needed and not useful for our purposes.
2. Drafting compass and ruler to be used in a lab (Lab 11)

You can go to a Longs store and buy reasonable ones. No need to be in a professional quality.

COURSE TASKS

Dear Geography Students:

Welcome to the Geography 101-L course, The Natural Environment Lab. This lab class examines the Earth's Natural Environment. The structure and processes of major environments will be examined.

Assignments:

It is assumed that you read and understand all the related part of the textbook before each lab (see the class schedule attached) and ready for lab exercise.

Participation:

Participation in the class discussion is recommended. There will be 13 discussion topics in the Discussions and Private Messages page on Laulima. You can also set up a new topic.

The first one is "Introduce Yourself" in which you introduce yourself to the class. I believe this is important as we will work together as a group for the semester.

The other 12 topics are for 12 lab exercises.

ASSESSMENT TASKS AND GRADING

Student Evaluation:

There will be (1) Lab Format quiz (quiz about the syllabus content and how this lab is operated) and (2) 12 lab exercises.

To take quizzes and upload your answers, go to the "Quizzes & Reports" page on Laulima.

Grades are based on 1 quiz (10 points) and 12 labs (20 points each), each lab with equal weight (different number of questions). The labs will contain information, questions, internet links, measurement assignments, and other information and tasks.

Some labs require that you answer a series of questions and submit your written answers for grading in Laulima. I will grade them after the completion deadline passes, generally Mondays, but please be patient as it may take two or three days to grade them all.

For other labs, you will take multiple choice tests addressing the material. These are open book, untimed tests. Your score will be shown immediately upon completion of the test.
For write-up questions, they should not be left unanswered. Such response will be assessed negatively (up to -20 pts, according to the importance of a question).

Labs are generally available weeks before their final deadline and may be completed and turned in any time before the due date, meaning that you are welcome to work ahead of the deadlines if you wish. **Late work will not be accepted.**

Also, labs may take more than one day to complete (the weather lab takes a minimum of 4 days, for example), so read the requirements carefully and plan accordingly.

GRADING SUMMARY

<table>
<thead>
<tr>
<th>Number</th>
<th>Points Each</th>
<th>Total Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lab Format</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>Labs</td>
<td>12</td>
<td>20</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Grade*</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>90.0 – 100.0 %</td>
</tr>
<tr>
<td>B</td>
<td>80.0 – 89.9 %</td>
</tr>
<tr>
<td>C</td>
<td>70.0 – 79.9%</td>
</tr>
<tr>
<td>D</td>
<td>60.0 – 69.9%</td>
</tr>
<tr>
<td>F</td>
<td>&lt; 60.0%</td>
</tr>
</tbody>
</table>

* IMPORTANT NOTE: To earn an A, a student must complete all 12 labs. Each missed lab reduces the maximum grade possible according to the table below:

<table>
<thead>
<tr>
<th>Labs Missed</th>
<th>Best Grade Possible</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
</tr>
<tr>
<td>2</td>
<td>C</td>
</tr>
<tr>
<td>3 or more</td>
<td>F</td>
</tr>
</tbody>
</table>

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: There is NO extra credit work.

Secrets of Success: Two key factors are especially important

(1) **Self-motivation**: Because this is an online course, nobody will push you to do the work. Thus, self-motivation is a key factor of success in this course.

(2) **Communication**: You are not alone. Continuous and open discussion among all participants is strongly recommended. You can use the “Class Discussion”
pages available in the Discussions tool of Laulima to communicate with each other. Group work and corroboration is encouraged (i.e., help each other).

**COURSE CONTENT**

**SCHEDULE**
(all deadlines are **Saturday nights**)

(Some labs may be substituted with new ones)

<table>
<thead>
<tr>
<th>Lab</th>
<th>Content</th>
<th>Format</th>
<th>Deadline (11:59 p.m.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Quiz on the Lab Format (Syllabus)</td>
<td>Quiz</td>
<td>2nd week</td>
</tr>
<tr>
<td>2</td>
<td>Location and Time</td>
<td>Quiz</td>
<td>3rd week</td>
</tr>
<tr>
<td>3</td>
<td>Isoline Maps</td>
<td>Written</td>
<td>4th week</td>
</tr>
<tr>
<td>4</td>
<td>Spatial Analyses</td>
<td>Written</td>
<td>5th week</td>
</tr>
<tr>
<td>5</td>
<td>Observation of the Natural Environment</td>
<td>Written</td>
<td>6th week</td>
</tr>
<tr>
<td>6</td>
<td>Sunlight and Temperature (<strong>IR thermometer</strong>)</td>
<td>Written</td>
<td>7th week</td>
</tr>
<tr>
<td>7</td>
<td>Water in the Atmosphere (<strong>IR thermometer</strong>)</td>
<td>Written</td>
<td>8th week</td>
</tr>
<tr>
<td>8</td>
<td>Hawaii Weather Patterns (<strong>4 day observation</strong>)</td>
<td>Written</td>
<td>9th week</td>
</tr>
<tr>
<td>9</td>
<td>Urban Ecology</td>
<td>Written</td>
<td>10th week</td>
</tr>
<tr>
<td>10</td>
<td>Soil Water Infiltration</td>
<td>Written</td>
<td>11th week</td>
</tr>
<tr>
<td>11</td>
<td>Hawaii Landforms</td>
<td>Quiz</td>
<td>12th week</td>
</tr>
<tr>
<td>12</td>
<td>Hot Spot and Earthquakes</td>
<td>Written</td>
<td>13th week</td>
</tr>
<tr>
<td></td>
<td>Hawaiian Words</td>
<td>Quiz</td>
<td>14th week</td>
</tr>
</tbody>
</table>

Make-up deadline with valid excuse | Last day of instruction

Week | Subject
--- | ---
1. | Class Format Quiz
2. | Location
3. | Isolines
4. | Internet Search
5. | Observation
6. | Sunlight
7. | Humidity
8. | Weather
9. | Urban Ecology
10. | Soil Water
11. | Landforms
12. | Hot Spot and Earthquakes
13. | Hawaiian Words

NOTE: Depending on the weather, this schedule 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](http://www.hawaii.edu/apis/ep/e7/e7208.pdf)) for the details.

Last revised September 2, 2017