Windward Community College
Welcomes you to

**MET 101**
Meteorology is fun!!

Optional orientation meeting
WCC Hale Imilo‘a 112B (Hoa‘aina Lab)

8/24 (M) 3:30 pm and
8/25 (T) 4:30 pm

Optional field trip (extra credit) to the
National Weather Service Forecast Office
Date & time will be announced later.

(Updated on: August 22, 2009)

**NOTE:** To start MET 101, you MUST complete the following 3 tasks (10 points).
They are designed to make you familiar with the procedures you need to use **Laulima:**

1. After carefully reading this syllabus, download the **Syllabus Acceptance Form** from the Laulima Resources page, fill it up, and submit it via Assignments tool (into “Syllabus Acceptance”) by the end of the 3rd week. You can access the Resources and Assignments pages by clicking an appropriate name in the Table of Contents (TOC) on the left column. Without the acceptance, you are NOT allowed to participate in this course (i.e., dismissed with a failing grade). (No points assigned)

2. Access the **Discussion and Private Messages** page from TOC, click **Class Discussion**, and open **Introduce yourself** topic. You can introduce yourself to the class here. Please, however, refrain from subjects that are not appropriate in public discussion. (5 points)

3. Access the **Tasks, Tests and Surveys** page from TOC. Open **MET 101 Presurvey** (20 questions) and answer the questions. This survey is used for a Student Learning Outcome assessment purpose only. It is NOT an exam (although it is in a test format, and not anonymous for the purpose of giving points to individuals), thus if you take it, you will receive the full credit. (5 points)
When you complete the above 3 tasks, you will receive total of 10 points. Note that your points will be posted in the Gradebook under “Syllabus Acceptance.” Without the submission of your syllabus acceptance, the points will not be posted.

Meteorology 101—Introduction to Meteorology
03
Online: Laulima (CRN: 62128)

INSTRUCTOR: Toshi Ikagawa, Ph.D.
OFFICE: Na`auao 116
OFFICE HOURS: MTWTh: 11:30 am – 1:00pm
TELEPHONE: 236-9216; ikagawa@hawaii.edu
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

Introduction to Meteorology (MET 101), 3 credits. Introduction to the study of basic atmospheric physics, Sun-Earth-atmosphere-ocean-human interrelationships, major weather systems and forecasting, with special emphasis on Hawai‘i. For both science and non-science majors and prospective science teachers.

STUDENT LEARNING OUTCOMES

At the completion of the course the student will be able to:

1. Describe the components, processes and resulting weather patterns in the atmosphere.
2. Interpret the components of weather maps, and forecast weather.
3. Apply the scientific method and theories and concepts of meteorology (atmospheric physics) to explain major weather systems.
4. Explain critically the relationship between humans and the atmospheric environment.
REQUIREMENTS COURSE SATISFIES:

At WCC: Meets AA degree physical science requirement of the Natural Science requirements. Also fills marine related elective requirement of the Marine Option Program (MOP).

At UHM: Meets Natural Science general education requirements (DP).

PREREQUISITES

None

CO-REQUISITES

None

RECOMMENDED PREPARATION AND BASIC SKILLS

Ability to read and write at a college level is recommended. Knowledge of college level algebra and geometry is also helpful to understand course material.

METHOD OF INSTRUCTION

Online (Internet & Laulima)

Useful readings prepared by Dr. Brian Richardson
(a) Getting Started with Laulima
(b) Forwarding Your UH Mail to Another Email Account

LEARNING RESOURCES

Course package includes:


   ! Textbook is NOT online


3. Access to the American Meteorological Society course homepage

Reference and Supplementary Materials
Many informative web sites are available for the subjects covered. Check the links provided in the MET 101 section of my web page:

http://www.wcc.hawaii.edu/facstaff/ikagawa-t/

**COURSE TASKS**

**Assignments:**

The AMS online course materials are accessible at:

AMS Homepage

It is assumed that you will read and complete all assigned materials.

! Hawai‘i specific homework will be given via UH Laulima

To access the MET 101 Laulima site:

https://laulima.hawaii.edu/portal

Useful readings prepared by Dr. Brian Richardson

(a) Getting Started with Laulima
(b) Forwarding Your UH Mail to Another Email Account

For additional information, see my web site at WCC:

http://www.wcc.hawaii.edu/facstaff/ikagawa-t/

________________________________________________________________

**WARNING:** Please do NOT share the Log-in information with a third party. Any violation of this confidentiality will lead you to dismissal from this course, at least.

________________________________________________________________

**ASSESSMENT TASKS AND GRADING**

**Evaluation:**

There will be 3 exams (100 points each; total 300 points), a self introduction/syllabus acceptance/presurvey (10 points), 24 Investigations and Current Weather studies (A and B for each of 12 Chapters of the textbook; 10 points each; total 240 points), and 5 Hawai‘i-related homework assignments (10 points each; total 50 points). There are 600 total points possible (See “Grading Scale” below).
The distribution of “10 points” for each Investigation/Current Weather assignment is as follows (that is, total 20 points for each Chapter):

<table>
<thead>
<tr>
<th>Subject</th>
<th>Evaluation</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Answering questions in the <a href="#">Investigation Manual</a> (online input)</td>
<td>Calculated based on the % of your correct answers</td>
<td>5 pts</td>
</tr>
<tr>
<td>Submission of the AMS Response Form (aka Investigation Answer Form) for the <a href="#">Current Weather Studies</a> (online) to the Assignment Box</td>
<td>Calculated based on the % of your correct answers</td>
<td>3 pts</td>
</tr>
<tr>
<td>Discussions on WebCT (NOTE: Total 2 entries needed)</td>
<td>Reasonable 2 entries for each investigation*</td>
<td>2 pts</td>
</tr>
<tr>
<td>Total points possible</td>
<td></td>
<td>10 pts</td>
</tr>
</tbody>
</table>

*: “Reasonable” means that a single-line comment such as “That’s great!” will not count. Use your common sense, please.

**NOTE:** Submission of Investigations for Chapters 13, 14 and 15 (no discussion required) are considered **extra credit work** (total max. 30 points; see Due dates).

**ACADEMIC DISHONESTY**  (SERIOUS WARNING!!)

Academic dishonesty such as cheating and plagiarism that 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 for any reason. It is NOT worth it.

**GRADING SCALE:** 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 Credit/Non-Credit options, Incomplete (“I” grade), and “W” grade, see the WCC College Catalog.

There is no “N” grade in this class.

**EXTRA CREDIT:** There are total of 100 points available as extra credit work for the class:

1. Extra exam (covers Ch 13-15; 25 points)
2. Postsurvey (similar to the presurvey) (15 points)
3. Investigations 13-15 (6 investigations; 5 points each; 30 points)
4. NWS visit report (30 points)
WCC 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 all students will strictly follow the WCC Code of Student Conduct (see Student Affairs, WCC Course Catalogue).

COURSE CONTENT

________________________________________________________________

COURSE PROCEDURES

________________________________________________________________

1. Access: Because this is an online course, you need to be able to access

   (1) UH Laulima site: https://laulima.hawaii.edu/portal

   Useful readings prepared by Dr. Brian Richardson
   (a) Getting Started with Laulima
   (b) Forwarding Your UH Mail to Another Email Account

   (2) AMS online course homepage: www.ametsoc.org/amsedu/login.cfm

________________________________________________________________

WARNING: Please do NOT share the access information with a third party. Any violation of this confidentiality will lead you to dismissal from this course, at least.

________________________________________________________________

NOTE: If you have any questions about this course, please e-mail me using the Laulima’s Private Messages available in Discussions and Private Messages tool available in TOC.

In case, if you cannot access Laulima, send e-mail to me at:
In such a case, always include “MET 101” in the subject field of your e-mail, so that I will notice it immediately.

2. 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 will use the “Questions” and “Student Lounge” pages available in the Discussions and Private Messages tool of **Laulima** to communicate with each other. For online investigations, group work is encouraged (i.e., help each other).

3. Chapter review (textbook)

(1) Read the assigned pages of the textbook. Then study the review questions for the chapter (Word format files are also available in **Resources** page).

To access reviews, from TOC, click **Tests and Quizzes**. You see MetCh01-08 (means “Chapter 1”), MetCh02-08, etc listed.

**NOTE**: You can access Reviews as many time as you wish. However, once an exam period starts, the corresponding review page will be **closed**. So, be sure to review questions ahead of the exam period.

This table shows the chapters in the textbook, corresponding review questions, and those for exams.

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Review</th>
<th>Exam</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Review 1</td>
<td><strong>Exam 1: Ch 1–4</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(50 questions will be selected)</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td><strong>Exam 2: Ch 5–8</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(50 questions will be selected)</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Review 2</td>
<td><strong>Exam 3: Ch 9–12</strong></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Review 3</td>
<td></td>
</tr>
</tbody>
</table>
4. Exams (online):

(1) You will take your 3 exams via Laulima at The Learning Center (TLC) on Windward Community College campus by the Due Dates.

! You can take each exam ONLY once.

NOTE: If necessary, you can arrange to take exams at other designated testing sites (Click “Student Resources” and go to the bottom of the page for “Exam Proctoring”). Please contact the instructor to set up your testing site.

The list of locations is found at:

http://www.hawaii.edu/uhcc.e-learn/

Click Student Resources, and then scroll down to the 3rd table.

5. Investigation Manual (lab manual)

(1) Read the assigned pages of the textbook. Then study the assigned investigation in the Manual (A & B every week).

When you complete the investigation, enter your answers online on Laulima by the due date. You can access “Investigations” from Tasks, Tests and Surveys page.

NOTE: You can enter your answers only once. Be sure of your answers before submitting.

6. Current Weather Studies (online): AMS Homepage

(1) Go to the AMS homepage and complete the investigations for the week (Investigation A will be posted on Monday, and B will be posted on Wednesday each week by the AMS). Due date is the same as Investigation Manual above.
Use the **Investigation Response Form** provided online to answer questions. Submit your completed response form (answers of A and B on the SAME page) to the **Assignments** on the **Laulima** by the **due date**.

To do this, like you did in “Syllabus Acceptance” exercise, first you click the **Assignments** in TOC, and then click the appropriate assignment (such as Investigation 1). On the Assignment page, you can either “copy & paste” or “attach” your response form from your computer to **Laulima** (use the **Add Attachment** button to attach).

The **Math Skills** parts are optional. You might find them interesting.

! Chapters 13, 14 and 15 are supplements and, if you want extra credits, these investigations should be completed by the designated **due dates**.

### 7. Discussion (online):

1. Like you did in “Introduce Yourself” exercise, post your **Report** (i.e. your reactions, opinions, etc.; NOT the response form) in the appropriate topic area in the **Class Discussions** section of **Discussions and Private Messages** by the **due date**. For example, you can report how you did it, what mistakes you made, what questions you still have, etc.

---

**WARNING**: Please do NOT share the Discussions tool with a third party. Any violation of this confidentiality will lead you to dismissal from this course, at least.

---

! During the first 2 weeks of instruction, to familiarize yourself with the Discussions and Private Messages tool, you **introduce** yourself (Report). Also, comment on at least two reports (Reply).

You can seek **help** from your fellow students by posting your problems in the Class Discussions section. It is strongly encouraged that you help each other.

**To access Class Discussions:**

Log in to **Laulima** → Go to MET 101 page
TOC > **Discussions and Private Messages** Tools

The Discussions opens. Go to Class Discussion. Click on the appropriate topic and compose your message. Your report should **NOT** exceed 250 words.
To compose your report, an easy way is to type your report using MS Word or other word processor, and then copy and paste it in a message. Don’t forget your **Name**.

Also, be sure to **Reply** to at least one entry in the Discussions. In other words, you write your reaction to at least one person’s report. For each Investigation/Current Weather assignment, therefore, you write **TWO** (one report and one reply) entries. Thus, you should have at least **FOUR** entries in the Discussion for each Chapter (2 for A and 2 for B). Again, you are strongly encouraged to assist your fellow students.

! Discussion for each chapter/investigation remains open for 1 week after the due date mentioned above. Be sure to report and reply within this time period.

**8. Homework:**

(1) There are 5 **Homework** assignments. You can access them via **Laulima** (2-3 paragraphs expected for each):

TOC > Resources > Homework folder >

After you complete each homework assignment, you upload it to:

TOC > Assignments >

! You need to submit your homework answers to the **Assignments** on the **Laulima** by the time indicated in the **Due Dates**.

---

**AMS Homepage Schedule**

**COURSE CONTENT AND APPROXIMATE TIME TO BE SPENT ON EACH TOPIC**

---

**Fall 2009 (Week does **not** correspond with that of WCC schedule)**

**Investigations Listing**
AMS Weather Studies Fall 2009 Schedule

AMS Weather Studies course investigations are self-contained in the Investigations Manual or may be completed by using the Manual introductory section with Current Weather Studies posted to the course website during fall and spring semesters.

The following is the schedule of our postings of Current Weather Studies investigations. Each “A” investigation will be posted on Mondays (by about noon Eastern Time) and the “B” investigation will be posted on Wednesdays. “Current Weather Studies” for optional Chapters 13, 14, and 15 (which may be used at any point in the course) are updated prior to the start of each fall semester and are available year-round.

**Fall 2009**

<table>
<thead>
<tr>
<th>Week</th>
<th>Current Weather Studies A (Posted about Monday noon ET)</th>
<th>Current Weather Studies B (Posted about Wednesday noon ET)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preview</td>
<td>Aug 31 - Air Pressure and Wind</td>
<td>Sep 2 - Surface Air Pressure Patterns</td>
</tr>
<tr>
<td>1</td>
<td>Sep 7 - Air Pressure and Wind</td>
<td>Sep 9 - Surface Air Pressure Patterns</td>
</tr>
<tr>
<td>2</td>
<td>Sep 14 - Surface Weather Maps</td>
<td>Sep 16 - The Atmosphere in the Vertical</td>
</tr>
<tr>
<td>3</td>
<td>Sep 21 - Weather Satellite Imagery</td>
<td>Sep 23 - Sunlight Throughout the Year</td>
</tr>
<tr>
<td>Requirement</td>
<td>Due Date</td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------</td>
<td>-----------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Self introduction &amp; Presurvey</td>
<td>3rd week at WCC</td>
<td></td>
</tr>
<tr>
<td>Syllabus acceptance</td>
<td>3rd week</td>
<td></td>
</tr>
<tr>
<td>Investigations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Answers (A &amp; B)</td>
<td><strong>Saturday evening</strong>, every week (check due dates online in the Exams and Investigation page)</td>
<td></td>
</tr>
<tr>
<td>Discussions</td>
<td>Same as the above</td>
<td></td>
</tr>
<tr>
<td>Current Weather</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Response form</td>
<td>Same as the “Investigation” above (dues dates are also available in the Assignments page)</td>
<td></td>
</tr>
<tr>
<td>Homework</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mauna Loa Observatory</td>
<td>5th week Saturday</td>
<td></td>
</tr>
<tr>
<td>Clouds</td>
<td>6th week <strong>Saturday</strong></td>
<td></td>
</tr>
<tr>
<td>Sounding data</td>
<td>9th week <strong>Saturday</strong></td>
<td></td>
</tr>
<tr>
<td>Weather map interpretation</td>
<td>10th week <strong>Saturday</strong></td>
<td></td>
</tr>
<tr>
<td>Atmosphere-human</td>
<td>13th week <strong>Saturday</strong></td>
<td></td>
</tr>
</tbody>
</table>

**COURSE DUE DATES**

---

**Requirement**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self introduction &amp; Presurvey</td>
<td>3rd week at WCC</td>
</tr>
<tr>
<td>Syllabus acceptance</td>
<td>3rd week</td>
</tr>
<tr>
<td>Investigations</td>
<td></td>
</tr>
<tr>
<td>Answers (A &amp; B)</td>
<td><strong>Saturday evening</strong>, every week (check due dates online in the Exams and Investigation page)</td>
</tr>
<tr>
<td>Discussions</td>
<td>Same as the above</td>
</tr>
<tr>
<td>Current Weather</td>
<td></td>
</tr>
<tr>
<td>Response form</td>
<td>Same as the “Investigation” above (dues dates are also available in the Assignments page)</td>
</tr>
<tr>
<td>Homework</td>
<td></td>
</tr>
<tr>
<td>Mauna Loa Observatory</td>
<td>5th week Saturday</td>
</tr>
<tr>
<td>Clouds</td>
<td>6th week <strong>Saturday</strong></td>
</tr>
<tr>
<td>Sounding data</td>
<td>9th week <strong>Saturday</strong></td>
</tr>
<tr>
<td>Weather map interpretation</td>
<td>10th week <strong>Saturday</strong></td>
</tr>
<tr>
<td>Atmosphere-human</td>
<td>13th week <strong>Saturday</strong></td>
</tr>
<tr>
<td>Exam</td>
<td>relationship</td>
</tr>
<tr>
<td>------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>1</td>
<td>7th-8th week (Ends on Friday)</td>
</tr>
<tr>
<td>2</td>
<td>11th-12th week (Ends on Friday)</td>
</tr>
<tr>
<td>3</td>
<td>15th-16th week (Ends on Friday)</td>
</tr>
</tbody>
</table>

For exact dates and time, check the Calendar on [Laulima](#).

! Nothing will be accepted after the designated due dates.

! Testing Centers may **not** be open on the due dates!