

ATMO 101-- Introduction to Weather and Climate

03

Online: [Laulima](#) (CRN: 62474)

INSTRUCTOR: Toshi Ikagawa, Ph.D.
OFFICE: Na'auao 127
OFFICE HOURS: TR: 11:30 a.m. – 1:00 p.m. by appointment
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EFFECTIVE DATE: Fall 2019

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

Introduction to Weather and Climate (ATOMO 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 full fill 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](#)

Occasionally, a rush message is disseminated via the UH e-mail. Please check your UH e-mail often.

LEARNING RESOURCES

Course package includes:

1. **Textbook:** *Weather Studies*, Latest Ed. by Joseph M. Moran.
American Meteorological Society

! Textbook is also available **online**. For more information, please contact WCC Bookstore: 235-7418)

2. **ATMO 101 Workbook** (may be still titled "MET 101 Workbook"),
compiled by the instructor (Available at WCC Bookstore; also available as a PDF file in the Laulima Resources page)

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:

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

To access the ATOMO 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** of 60 questions each (counted 60 points each; total 180 points). **Reviews** are available in the **Resources** page. Study them **before** taking the Exams.
- **12 Workbook Exercises** (10 points each; total 120 points).
- **Discussions** (2 entries per week required, Total 30 points)

Thus, there are **330** total points possible (See "[Grading Scale](#)" below).

- **Extra Credit Exam** (**Optional**, **extra** points up to 15 pts)

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 **15** points available as **extra credit** work for the class:

1. **Extra Credit Exam** (**extra** 15 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*). Refer to the Student Conduct Code (<http://www.hawaii.edu/apis/ep/e7/e7208.pdf>) for the details.

COURSE CONTENT

COURSE PROCEDURES

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

(1) UH [Laulima](https://laulima.hawaii.edu/portal) 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](#)

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 my UH e-mail address (lkagawa@hawaii.edu). Always include “**ATOMO 101**” in the subject field of your e-mail, so that I will notice it immediately. This will be automatically done if you use the **Email tool** in Laulima.

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 tool of [Laulima](#) to communicate with each other. For online investigations, group work is encouraged (i.e., help each other).

3. Chapter review (textbook)

Read the assigned pages of the textbook. Then study the **Review Questions** for the chapters (MS WORD format files are available in **Resources** page).

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

Chapter	Review	Exam
1	Review 1	Exam 1: Ch 1–4
2		

3		(60 questions will be randomly selected from the 120 review questions)
4		
5	Review 2	Exam 2: Ch 5–8 (60 questions will be randomly selected from the 120 review questions)
6		
7		
8		
9	Review 3	Exam 3: Ch 9–12 (60 questions will be randomly selected from the 120 review questions)
10		
11		
12		
13	Review Extra	Extra Credit Exam (60 questions will be randomly selected from the 150 review questions)
14		
15		

4. Exams (online):

(1) You will take your **3 Exams** via [Laulima](#) at a Testing Center on [Windward Community College](#) campus (or other campuses) by the [Due Dates](#). **Reviews** are available in the **Resources** page. Study them **before** taking the Exams.

! You can take each exam **ONLY** once.

NOTE: If necessary, you can arrange to take exams at other designated [testing sites](#). Please contact the instructor to set up your testing site.

The list of locations is found at:

http://www.hawaii.edu/dl/faculty/prep/proctor_office.html

NOTE:

An online proctoring service is also available at ProctorU (<https://www.proctoru.com/>). With fee.

5. ATOMO 101 Workbook (MET 101 Workbook)

(1) Read the assigned pages of the textbook. Then study the assigned exercise.

When you complete the exercise, enter your answers online on Laulima by the [due date](#). You can access “Investigations” from **Exams & Quizzes** page.

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

Contents of the Workbook:

	Subjects	Due
1.	Air Pressure and Wind	Week 2
2.	Structure of Atmosphere	Week 3
3.	Solar and Terrestrial Radiation	Week 4
4.	Heat and Temperature	Week 5
5.	Air Pressure	Week 6
6.	Humidity	Week 7
7.	Clouds and Precipitation	Week 8
8.	Wind and Weather	Week 9
9.	Atmosphere's Planetary Circulation	Week 10
10.	Weather System of Middle Latitude	Week 11
11.	Thunderstorms and Tornadoes	Week 12
12.	Tropical Weather System	Week 13

6. 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** 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 tool, you do **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 Tool**

The Discussions opens. Go to Class Discussion. Click on the appropriate topic and compose your message. Your report should **NOT** exceed 250 words.

You can add your picture, or any picture you like (of course, nothing obscene or offensive, please), in Discussions, My Profile. Go to "Avatar" at the bottom of the page. Please use rather small pictures.

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. Thus, you should have at least **TWO** entries. Again, you are strongly encouraged to assist your fellow students.

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

NOTE: If you have any questions about this course, please e-mail me using my UH e-mail address (lkagawa@hawaii.edu). Always include "**MET 101**" in the subject field of your e-mail, so that I will notice it immediately. This will be automatically done if you use the **Email tool** in Laulima.

COURSE DUE DATES

Requirement	Due Date
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Workbook Exercises		Saturday evening , every week 2nd-13th Week (Ends on Saturday) (check due dates online in the Exams & Quizzes page) NOT proctored , so you can complete them at home. Note, however, it is timed
Discussions		Same as the above
Exams	Exam 1: Ch 1--4	6th-7th week (Ends on Friday)
	Exam 2: Ch 5--8	10th-11th week (Ends on Friday)
	Exam 3: Ch 9--12	15th-16th week (Ends on Friday)
Extra Credit Exam (Optional)		15th-16th week (Ends on Friday)
All Extra Credit Assignments (If any)		16 th week (Last Day of Instruction)

NOTE 1: Exact open and due dates of each exam/quiz are available on **Exams, and Quizzes** page on [Laulima](#). Exams, etc. are due at **3 p.m.** of the due date, not at the time of a testing center closes.

! Nothing will be accepted after the designated due dates.

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

NOTE 2: No personal items, including **electronic device** (such as a cell phone and iPad), are allowed during the proctored assignments.

NOTE 3: If you have any questions about this course, please e-mail me using my UH e-mail address (lkagawa@hawaii.edu). Always include "**ATMO 101**" in the

subject field of your e-mail, so that I will notice it immediately. This will be automatically done if you use the **Email tool** in Laulima.

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.

Title IX

Title IX prohibits discrimination on the basis of sex in education programs and activities that receive federal financial assistance. Specifically, Title IX prohibits sex discrimination; sexual harassment and gender-based harassment, including harassment based on actual or perceived sex, gender, sexual orientation, gender identity, or gender expression; sexual assault; sexual exploitation; domestic violence; dating violence; and stalking. For more information regarding your rights under Title IX, please visit: https://windward.hawaii.edu/Title_IX/.

Windward Community College (WCC) is committed to the pursuit of equal education. If you or someone you know has experienced sex discrimination or gender-based violence, WCC has resources to support you. To speak with someone confidentially, contact Karla Silva-Park, Mental Health Counselor, at 808-235-7468 or karlas@hawaii.edu or Kaahu Alo, Designated Confidential Advocate for Students, at 808-235-7354 or kaahualo@hawaii.edu. To make a formal report, contact the Title IX Coordinator at 808-235-7393 or wcctix@hawaii.edu.

ACADEMIC INTEGRITY

Work submitted by a student must be the student's own work. The work of others should be explicitly marked, such as through use of quotes or summarizing with reference to the original author.

Students can upload papers to <http://www.TurnItIn.com> to have papers checked for authenticity, highlighting where the paper potentially fails to appropriately reference sources.

In this class, students who commit academic dishonesty, cheating or plagiarism will have the following consequence(s):

Students will receive a failing grade for plagiarized assignments.

All cases of academic dishonesty are referred to the Vice Chancellor for Student Affairs.

ALTERNATE CONTACT INFORMATION

If you are unable to contact the instructor, have questions that your instructor cannot answer, or for any other issues, please contact the Academic Affairs Office:

Location: Alakai 121

Phone: 808-235-7422

Email: wccaa@hawaii.edu

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.

Last revised: July 9, 2019