
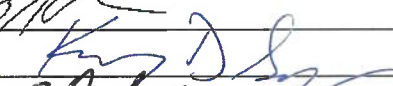
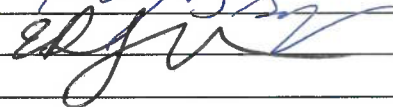
 FLORIDA ATLANTIC UNIVERSITY	COURSE CHANGE REQUEST Undergraduate Programs	UUPC Approval _____ UFS Approval _____ SCNS Submittal _____ Confirmed _____ Banner Posted _____ Catalog _____
Department Geosciences College Science		
Current Course Prefix and Number MET2010		Current Course Title Weather, Climate, and Climate Change
Syllabus must be attached for ANY changes to current course details. See Template . Please consult and list departments that may be affected by the changes; attach documentation.		
Change title to: Weather and Climate Change prefix From: To: Change course number From: To: Change credits* From: To: Change grading From: To: Change WAC/Gordon Rule status** Add <input type="checkbox"/> Remove <input type="checkbox"/> Change General Education Requirements*** Add <input type="checkbox"/> Remove <input type="checkbox"/> <small> *See Definition of a Credit Hour. **WAC/Gordon Rule criteria must be indicated in syllabus and approval attached to this form. See WAC Guidelines. ***GE criteria must be indicated in syllabus and approval attached to this form. See Intellectual Foundations Guidelines. </small>		Change description to: Introduction to the study of the Earth's atmosphere and climate. Includes study of structure, temperature, pressure, atmospheric circulation, precipitation and storms, the hydrological cycle, heat budget, winds, air pollution, global climate, and local and regional weather forecasting. Change prerequisites/minimum grades to: Change corequisites to: Change registration controls to: Please list existing and new pre/corequisites, specify AND or OR and include minimum passing grade (default is D-).
Effective Term/Year for Changes: Summer 2025		Terminate course? Effective Term/Year for Termination:
Faculty Contact/Email/Phone Erik Johanson, enjohanson@fau.edu, 561-297-4153		
Approved by Department Chair  College Curriculum Chair  College Dean  UUPC Chair _____ Undergraduate Studies Dean _____ UFS President _____ Provost _____		Date 11/22/24 02/13/25  _____ _____ _____

Email this form and syllabus to mjenning@fau.edu seven business days before the UUPC meeting.



FLORIDA ATLANTIC UNIVERSITY

MET 2010-E01 15815

Weather and Climate

3 Credit(s)

Fall 2025 - 1 Full Term

Instructor Information

Erik Johanson

Email: ejohanson@fau.edu

Office: SE 473 or virtual

Office Hours: Mondays 10am-12pm, and by appointment

TA Name: Sabina Gyawali

Office: Science Building (SE) Room 404

Office Hours: TBA

Email: sgyawali2023@fau.edu

Course Description

Introduction to the study of the Earth's atmosphere and climate. Includes study of structure, temperature, pressure, atmospheric circulation, precipitation and storms, the hydrological cycle, heat budget, winds, air pollution, global climate, and local and regional weather forecasting.

Prerequisite(s): NA

Corequisite(s): NA

Instructional Method

Fully Online Class

100% of the course is delivered online.

Instructional Method (cont)

This is a fully online e-learning class with no in-person or set class time. The course will be taught in conjunction with Canvas (<http://canvas.fau.edu>) and Weather, Climate, & Beyond eTextbook through Top Hat. You must use your official FAU ID and Password to access the materials and assignments in this course. While it is not necessary to visit the FAU campus to complete the course, access to a computer with a broadband internet connection is required. Be aware that FAU offers computers with up-to-date software that are free to use by FAU students.

The course is organized into Learning Modules on Canvas with dates and assignments clearly listed. Students should receive required quizzes, view online lectures, connect to assigned readings and textbook assignments, and complete optional extra credit assignments through our Canvas site.

Your textbook assigned readings, textbook chapter questions, and the associated textbook homework assignments may be accessed via links found within the Canvas course site or the above links. The textbook authors and publisher have permitted the use of any content for quizzes.

We will be using the custom-built interactive eTextbook (Weather, Climate, & Beyond) within the Top Hat platform for this class. You can visit the Top-Hat-Overview and Getting Started Guide within the Top Hat Success Center which outlines how you will register for a Top Hat account (use official FAU email), as well as providing a brief overview to get you up and running on the system.

Required Texts/Materials

Weather, Climate, and Beyond: An Introduction to Physical Geography, Third Edition

ISBN: 9781774122150

Publisher: Top Hat Monocle

Edition: 3rd

Course Objectives/Student Learning Outcomes

Upon successful completion of this course, students will be able to:

1. Recognize basic physics concepts that dictate the exchange of energy in the Earth Atmosphere System. (CO#1)
2. Identify the composition of the atmosphere, its structure, and the phenomena that it exhibits. (CO#2)
3. Identify the nature of both Latitudinal Radiation Imbalance and Seasonality. (CO#3)
4. Examine mechanisms that lead parcels of air to rise and fall through the atmosphere. (CO#4)
5. Categorize the various forms of winds, pressure, and precipitation. (CO#5)
6. Summarize principles of weather forecasting and air masses. (CO#6)
7. List the various forms of violent weather including Tropical Storms and Tornadoes. (CO#7)
8. Interpret the link between global climate zones and weather hazards. (CO#8)
9. Apply the Scientific Method to solve real-life meteorological problems. (CO#9)
10. Use mapping and geospatial technologies to visualize and represent the Earth. (CO#10)

Faculty Rights and Responsibilities

Florida Atlantic University respects the rights of instructors to teach and students to learn. Maintenance of these rights requires classroom conditions that do not impede their exercise. To ensure these rights, faculty members have the prerogative to:

- Establish and implement academic standards.
- Establish and enforce reasonable behavior standards in each class.
- Recommend disciplinary action for students whose behavior may be judged as disruptive under the Student Code of Conduct [University Regulation 4.007](#).

Disability Policy

In compliance with the Americans with Disabilities Act Amendments Act (ADAAA), students who require reasonable accommodations due to a disability to properly execute coursework must register with Student

Accessibility Services (SAS) and follow all SAS procedures. SAS has offices across three of FAU's campuses – Boca Raton, Davie and Jupiter – however disability services are available for students on all campuses. For more information, please visit the SAS website at www.fau.edu/sas/.

Course Evaluation Method

Course Evaluation

Critical Thinking Assignments	30%
Reading Questions	10%
Discussion Board Assignments	10%
Module Quizzes	50%
Extra Credit	+2%

Critical Thinking Assignments [30% of course grade] *lowest grade dropped

Each module will be accompanied with one or more Critical Thinking Assignments designed to practically apply the theoretical concepts discussed during the lecture portions of the class and the readings. Assignments are required and are of varying length & difficulty. They keep pace with the class and emphasize material needed for assessments. A student who does not attempt assignments will not pass the class. To access assignments, you'll need to purchase your required Top Hat textbook and register for an account.

Reading Questions [10% of course grade] *lowest grade dropped

Modules are accompanied with assigned readings from our textbook. Each assigned chapter will include a set of embedded Reading Questions within the chapter text to complete as you work through the reading. These are graded partially on attempting and partially on correctness. Multiple attempts are allowed. These are good questions to prepare you for the associated Critical Thinking Assignment and Module Quiz.

Discussion Board Assignments [10% of course grade] *no unapproved extensions

A total of FOUR discussion board assignments are assigned across the semester and graded for completion. Three of these relate to our Weather Blog that we'll add to periodically with relevant content. Most of the content from the Weather Blog will come from student discussion board posts. These assignments require students to look for news articles, stories, or other media to share related to weather and climate both local and global. Students will then comment on other posts from their discussion board group. All the Weather Blog assignments are open at the start of the semester but are due at different dates in the semester. You can do them all right away or wait but pay attention to the due dates because there are no extensions. It is suggested that responses are 3-5 sentences in length.

There is also one Interactive Discussion Board Assignment where students will follow a prompt to use a web-based climate model of the Earth to collect weather data from their hometown over the past several years. You'll then explain your general trends and comment on several posts from your classmates.

Module Quizzes [50% of course grade] *late quiz policy results in 20% deduction per day late

Each of the modules will culminate with a quiz designed to assess each student's comprehension of the material presented therein. An introductory/syllabus quiz will also be issued. The quizzes will include multiple choice, true/false and/or short answer questions. Answers will be evaluated based on content in terms of accuracy of information and ability to analyze the issues. Quizzes will be taken online in Canvas and will be timed. There will be no 'make-up' quizzes unless arranged prior to and with good reason. There are no exams, so quizzes are very important to your grade!

Extra-credit [+2% of course grade] *optional

Built into the course, you will find FOUR extra-credit assignments in the form of multiple-choice quizzes on Canvas, typically based on an assigned reading or documentary. These will become available at the appropriate time during the course and will not be available after the due date. If you

receive full credit for all of the extra credit assignments, you'll receive +2 percentage points to your final grade. If you Extra Credit is completely optional. Electing to attempt or not attempt the extra credit cannot negatively affect your course grade—it can only improve it!

*Grading Policies:

Auto Grade Drop Policy: your lowest Critical Thinking Assignment and Reading Questions will be automatically dropped at the end of the semester. If you have an emergency or forget to complete an assignment on time, this is your one-time excuse. You do not need to request for it to be applied.

Late Quiz Policy: your quiz submissions (through Canvas) will receive a 20% deduction per day late. This is handled automatically through Canvas. It is critical to complete your quizzes on time to maximize your possible points so always check your due dates.

Discussion Board Policy: your discussion posts are designed to encourage interaction with your classmates and instructors. Therefore, no late extensions are available for discussion board assignments.

Extension Policy: you have one grade automatically dropped for your lowest (or missed) Critical Thinking Assignment and Reading Questions Assignment. You also have a late submission option for your quizzes. As such, your instructor will not reopen any missed grades. Do not request extensions

Code of Academic Integrity

Students at Florida Atlantic University are expected to maintain the highest ethical standards. Academic dishonesty is considered a serious breach of these ethical standards, because it interferes with the university mission to provide a high quality education in which no student enjoys an unfair advantage over any other. Academic dishonesty is also destructive of the university community, which is grounded in a system of mutual trust and places high value on personal integrity and individual responsibility. Harsh penalties are associated with academic dishonesty. For more information, see [University Regulation 4.001](#).

Plagiarism

Plagiarism is unacceptable in the University community. Academic work must be an original work of your own thought, research, or self-expression. When students borrow ideas, wording, or organization from another source, they must acknowledge that fact in an appropriate manner. Plagiarism is the deliberate use and appropriation of another's work without identifying the source and trying to pass off such work as one's own. Any student who fails to give full credit for ideas or materials taken from another has plagiarized. This includes all discussion board posts, journal entries, wikis, and other written and oral presentation assignments. If in doubt, cite your source.

Course Etiquette

As this is a fully online course, students must use good etiquette, which is proper or polite behavior on the internet. How we communicate to each other is very important in this course. In order to maintain a positive online environment for our class, we all need to follow the etiquette guidelines: Show respect for the instructor, teaching assistants, and for other students in the class; Respect the privacy of other students. (no spamming student emails); Express differences of opinion in a polite and rational way; Avoid bringing up irrelevant topics when involved in group discussions; Use mainly lowercase in their messages with proper capitalization rules followed (use of all uppercase in a message is the equivalent of shouting and is considered offensive; Use appropriate language in messages that are conversational and positive in nature and not threatening or offensive.

Attendance Policy Statement

Students are expected to attend all their scheduled University classes and to satisfy all academic objectives as outlined by the instructor. The effect of absences upon grades is determined by the instructor, and the University reserves the right to deal at any time with individual cases of nonattendance. Students are responsible for arranging to make up work missed because of legitimate class absence, such as illness, family emergencies, military obligation, court-imposed legal obligations, or participation in University-approved activities. Examples of University-approved reasons for absences include participating on an athletic or scholastic team, musical and theatrical performances, and debate activities. It is the student's responsibility to give the instructor notice prior to any anticipated absences and within a reasonable amount of time after an unanticipated absence, ordinarily by the next scheduled class meeting. Instructors must allow each student who is absent for a University-approved reason the opportunity to make up work missed without any reduction in the student's final course grade as a direct result of such absence.

You are responsible for completing the process of dropping or withdrawing from a course. Please click on the following link for more information on dropping and/or withdrawing from a course. Please consult the FAU Registrar Office for more information.

Religious Accommodation Policy Statement

In accordance with the rules of the Florida Board of Education and Florida law, students have the right to reasonable accommodations from the University in order to observe religious practices and beliefs regarding admissions, registration, class attendance, and the scheduling of examinations and work assignments. University Regulation 2.007, Religious Observances, sets forth this policy for FAU and may be accessed on the FAU website at www.fau.edu/regulations.

Any student who feels aggrieved regarding religious accommodations may present a grievance to the executive director of The Office of Civil Rights and Title IX. Any such grievances will follow Florida Atlantic University's established grievance procedure regarding alleged discrimination.

Time Commitment Per Credit Hour

For traditionally delivered courses, not less than one (1) hour of classroom or direct faculty instruction each week for fifteen (15) weeks per Fall or Spring semester, and a minimum of two (2) hours of outof-class student work for each credit hour. Equivalent time and effort are required for Summer Semesters, which usually have a shortened timeframe. Fully Online courses, hybrid, shortened, intensive format courses, and other non-traditional modes of delivery will demonstrate equivalent time and effort.

Course Grading Scale

Letter Grade	Letter Grade
A	93 - 100%
A-	90 - 92%
B+	87 - 89%
B	83 - 86%
B-	80 - 82%
C+	77 - 79%
C	73 - 76%
Letter Grade	Letter Grade
C-	70 - 72%
D	60 - 69%
F	Below 60

Grade Appeal Process

You may request a review of the final course grade when you believe that one of the following conditions apply:

- There was a computational or recording error in the grading.
- The grading process used non-academic criteria.
- There was a gross violation of the instructor's own grading system.

[University Regulation 4.002](#) of the University Regulations contains information on the grade appeals process

Policy on Make-up Tests, Late work, and Incompletes

Make-up work must be approved by the instructor. Ideally, reach out prior to an issue to arrange an accommodation for a university allowed reason. However, this course is fully online and therefore a justification for an extension must warrant the minimum one-week open period available for each assignment.

See other late work policies in the Course Evaluation Method section.

Policy on the Recording of Lectures

Students enrolled in this course may record video or audio of class lectures for their own personal educational use. A class lecture is defined as a formal or methodical oral presentation as part of a university course intended to present information or teach students about a particular subject. Recording class activities other than class lectures, including but not limited to student presentations (whether individually or as part of a group), class discussion (except when incidental to and incorporated within a class lecture), labs, clinical presentations such as patient history, academic exercises involving student participation, test or examination administrations, field trips, and private conversations between students in the class or between a student and the lecturer, is prohibited.

Recordings may not be used as a substitute for class participation or class attendance and may not be published or shared without the written consent of the faculty member. Failure to adhere to these requirements may constitute a violation of the University's Student Code of Conduct and/or the Code of Academic Integrity.

Counseling and Psychological Services (CAPS) Center

Life as a university student can be challenging physically, mentally and emotionally. Students who find stress negatively affecting their ability to achieve academic or personal goals may wish to consider utilizing FAU's Counseling and Psychological Services (CAPS) Center. CAPS provides FAU students a range of services – individual therapy, group therapy, and crisis services, to name a few - offered to help improve and maintain emotional well-being. For more information, go to <http://www.fau.edu/counseling/>

Student Support Services and Online Resources

- [Center for Learning and Student Success \(CLASS\)](#)
- [Counseling and Psychological Services \(CAPS\)](#)
- [FAU Libraries](#)
- [Math Learning Center](#)
- [Office of Information Technology Helpdesk](#)
- [Center for Global Engagement](#)
- [Office of Undergraduate Research and Inquiry \(OURI\)](#)
- [Science Learning Center](#)
- [Speaking Center](#)
- [Student Accessibility Services](#)
- [Student Athlete Success Center \(SASC\)](#)
- [Testing and Certification](#)
- [Test Preparation](#)
- [University Academic Advising Services](#)
- [University Center for Excellence in Writing \(UCEW\)](#)
- [Writing Across the Curriculum \(WAC\)](#)

Course Topical Outline

Official and Updated Due Dates are listed on the Modules page of Canvas.

Module	Dates	Topic	Assignments	Readings
Start Here	Week 1 and 2	Welcome	<ul style="list-style-type: none">• Student Introduction• Syllabus Quiz• Online Academic Integrity Assignment	

1	Week 1 and 2	Introduction and Understanding Science	<ul style="list-style-type: none"> • XCR 1: South Florida Weather/Climate • Quiz 1 • Reading Questions Ch 1 and Ch1b • CT Assignment Ch 1 	Ch 1 and 1b
2	Week 3	Earth-Sun Relationships	<ul style="list-style-type: none"> • XCR 2: Seasons • Weather Blog Discussion 1 • Quiz 2 • Reading Questions Ch 2 • CT Assignment Ch 2 	Ch 2
3	Week 4	Earth's Atmosphere	<ul style="list-style-type: none"> • Quiz 3 • Reading Questions Ch 3 • CT Assignment Ch 3 	Ch 3
4	Week 5	Insolation and Energy Balance	<ul style="list-style-type: none"> • Quiz 4 • Reading Questions Ch 4 • CT Assignment Ch 4 	Ch 4
5	Week 6	Temperature and Atmospheric Instability	<ul style="list-style-type: none"> • Weather Blog Discussion 2 • Quiz 5 • Reading Questions Ch 5 • CT Assignment Ch 5 	Ch 5
		Global Circulation	<ul style="list-style-type: none"> • Discussion Assignment - 	

6	Week 7		Weather Trends <ul style="list-style-type: none"> • Quiz 6 • Reading Questions Ch 6 • CT Assignment Ch 6 	Ch 6
7	Week 8 & 9	Precipitation, Atmospheric Pressure	<ul style="list-style-type: none"> • Quiz 7 • Reading Questions Ch 7 • CT Assignment Ch 7 	Ch 7
8	Week 10 & 11	Weather and Air Masses	<ul style="list-style-type: none"> • Quiz 8 • Reading Questions Ch 8 • CT Assignment Ch 8 	Ch 8
9	Week 12	Tropical Cyclones and Severe Weather	<ul style="list-style-type: none"> • XCR3: Tornadoes • Quiz 9 • Reading Questions Ch9 • CT Assignment Ch 9 	Ch 9
10	Week 13	Climate	<ul style="list-style-type: none"> • Weather Blog Discussion 3 • Quiz 10 • Reading Questions Ch10 • CT Assignment Ch10 	Ch 10
11	Week 14 & 15	Global Climate	<ul style="list-style-type: none"> • XCR4: Global Climate • Quiz 11 • Reading Questions Ch 11 • CT Assignment Ch 11 	Ch 11

Artificial Intelligence Preamble

FAU recognizes the value of generative AI in facilitating learning. However, output generated by artificial intelligence (AI), such as written words, computations, code, artwork, images, music, etc., for example, is drawn from previously published materials and is not your own original work.

FAU students are not permitted to use AI for any course work unless explicitly allowed to do so by the instructor of the class for a specific assignment. [\[Policy 12.16 Artificial Intelligence\]](#)

Class policies related to AI use are decided by the individual faculty. Some faculty may permit the use of AI in some assignments but not others, and some faculty may prohibit the use of AI in their course entirely. In the case that an instructor permits the use of AI for some assignments, the assignment instructions will indicate when and how the use of AI is permitted in that specific assignment. It is the student's responsibility to comply with the instructor's expectations for each assignment in each course. When AI is authorized, the student is also responsible and accountable for the content of the work. AI may generate inaccurate, false, or exaggerated information. Users should approach any generated content with skepticism and review any information generated by AI before using generated content as-is.

If you are unclear about whether or not the use of AI is permitted, ask your instructor before starting the assignment.

Failure to comply with the requirements related to the use of AI may constitute a violation of the [Florida Atlantic Code of Academic Integrity, Regulation 4.001](#).

Proper Citation: If the use of AI is permitted for a specific assignment, then use of the AI tool must be properly documented and cited. For more information on how to properly cite the use of AI tools, visit <https://fau.edu/ai/citation>