



FLORIDA
ATLANTIC
UNIVERSITY

Department Geosciences
College Science

UUPC Approval _____
UFS Approval _____
SCNS Submittal _____
Confirmed _____
Banner Posted _____
Catalog _____

**Current Course
Prefix and Number**

MET 2010

Current Course Title
Weather and Climate

Change title to:

Weather, Climate and Climate Change

Change prefix

From: To:

Change course number

From: To:

Change credits*

From: To:

Change grading

From: To:

Change WAC/Gordon Rule status**

Add Remove

Change General Education Requirements***

Add Remove

*Review Provost Memorandum

**WAC/Gordon Rule criteria must be indicated in syllabus and approval attached to this form. See [WAC Guidelines](#).

***General Education criteria must be indicated in syllabus and approval attached to this form. See [GE Guidelines](#).

Change description to:

Change prerequisites/minimum grades to:

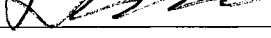
Change corequisites to:

Change registration controls to:

Please list existing and new pre/corequisites, specify AND or OR and include minimum passing grade (default is D-).

Faculty Contact/Email/Phone Erik Johanson / ejohanson@fau.edu / 7-4153

Approved by

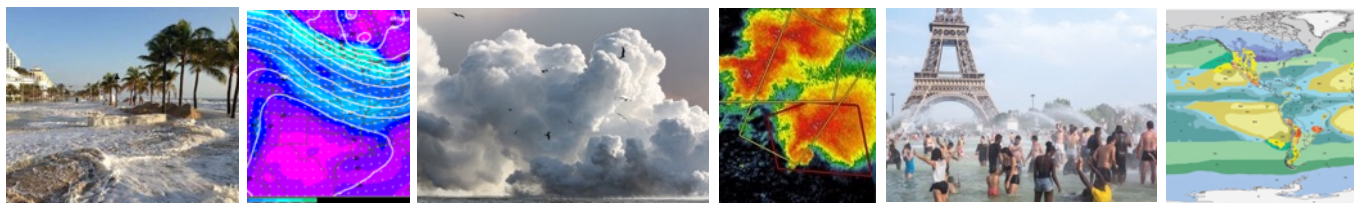
Department Chair 
College Curriculum Chair Jerry Haky (via email confirmation)
College Dean Evonne Rezler (via email confirmation)
UUPC Chair Jerry Haky (via email confirmation)
Undergraduate Studies Dean Edward Pratt (via email confirmation)
UFS President _____
Provost _____

Date

3/12/2020
3-27-20
3-27-20
3-30-20
3-31-20

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

MET 2010: WEATHER, CLIMATE, & CLIMATE CHANGE



Instructor: Dr. Erik Johanson
Office Location: Science Building (SE) 473
Office Hours: By appt and M 10am–12pm
Email: cjohanson@fau.edu

Geosciences Dept
Spring 2020
3 Credit Hours

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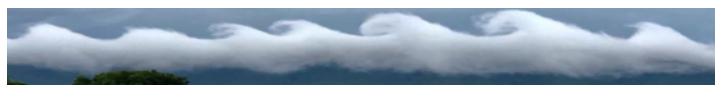
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Teaching Assistants:

Last Names A-N: TBA
Office Location: Science Building (SE) 475
Office Hours: M,W,F: 12 – 2pm
Email: TBA@fau.edu

Last Names O-Z: TBA
Office Location: Science Building (SE) 404
Office Hours: Thurs, 2pm – 5pm
Email: TBA@fau.edu

Grade	Total (%)
A	100 – 93
A-	92 – 90
B+	89 – 87
B	86 – 82
B-	81 – 80
C+	79 – 75
C	74 – 70
C-	69 – 65
D	65 – 55
F	54 – 0



REQUIRED MATERIALS

We are using the custom-built interactive eTextbook (Weather, Climate, & Beyond) within the Top Hat platform for this class.

Only the Top Hat eTextbook registration is required (use your FAU email address). Follow the email invite for the textbook or visit app.tophat.com/e/879109. There is **NO** physical textbook!

COURSE DESCRIPTION

Introduction to the processes of Earth’s surface and atmosphere that lead to distinctive weather patterns and climate zones as experienced by humanity. The course examines temperature and pressure, atmospheric circulation, precipitation and storms, the hydrological cycle, global climate and vegetation patterns, air pollution, and climate change.

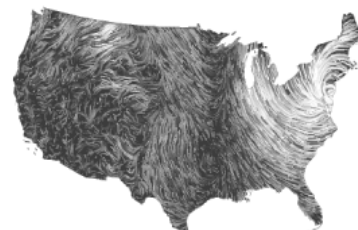
COURSE OBJECTIVES

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

1. Explore the History of Meteorology and the Scientific Method (CO#1)
2. Discover basic Physics concepts that dictate the exchange of energy in the Earth Atmosphere System (CO#2)
3. Identify the composition of the atmosphere, its structure, and the phenomena that it exhibits (CO#3)
4. Identify the nature of both Latitudinal Radiation Imbalance and Seasonality (CO#4)
5. Examine mechanisms that lead parcels of air to rise and fall through the atmosphere (CO#5)
6. Explore the nature of various forms of winds and precipitation (CO#6)
7. Summarize basic knowledge pertaining to weather forecasting (CO#7)
8. List the various forms of violent weather including Tropical Storms and Tornadoes (CO#8)
9. Examine Climate Change and its causes, both natural and anthropogenic (CO#9)
10. Explore the link between global climate zones and vegetation patterns (CO#10)

INTENDED AUDIENCE

This is a non-lab science core class; it helps to fulfill your general education (IFP) science core requirement. It contains science: some math & graphs, some laws & principles of physics; concepts that will help you understand the workings of the atmosphere and planet. There are no prerequisites.



COURSE DELIVERY MODE

This is a fully online e-learning class, and as such will be taught in conjunction with Canvas (<http://canvas.fau.edu>) and Weather, Climate, & Beyond eTextbook through Top Hat (<https://app.tophat.com/e/879109>). 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.

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 visiting (<https://app.tophat.com/e/879109>; join code 879109).

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 (<https://success.tophat.com/s/article/Student-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 ID**), as well as providing a brief overview to get you up and running on the system.

Top Hat may require a paid subscription, and a full breakdown of all subscription options available can be found here: www.tophat.com/pricing.

The total cost of your textbook and the platform is \$60 for FAU students. Content will be made available as we progress through the semester and you will have continued access to it once initially assigned.

TECHNICAL SUPPORT

Canvas:

In the online environment, there is always a possibility of technical issues (e.g., lost connection, hardware or software failure). Many of these can be resolved relatively quickly, but if you wait until the last minute before due dates, the chances of these glitches affecting your success are greatly increased. Please plan appropriately. If a problem occurs, it is essential you take immediate action to document the issue so your instructor can verify and take appropriate action to resolve the problem. Please take the following steps when a problem occurs:

1. Take a Print Screen or photo of the display screen when the problem occurs.
2. Complete a Help Desk ticket <http://helpdesk.fau.edu/>. Make sure you complete the form entirely and give a full description of your problem so the Help Desk staff will have the pertinent information in order to assist you properly. This includes:
 - a. Select “CANVAS (Student)” for the Ticket Type.
 - b. Input the Course ID.
 - c. In the Summary/Additional Details section, include your operating system, Internet browser, and Internet service provider (ISP).
 - d. Attach the Print Screen or photo, if available.
3. Send an email to your TA to notify them of the problem. Include all pertinent information of the incident.
4. If you do not hear back from the Help Desk or your TA within a timely manner (48 hours), it is your responsibility to follow up with the appropriate person until a resolution is obtained.
5. You may also contact the eLearning Success Team for assistance – 561-297-3590; eSuccess@fau.edu – or stop by during the posted hours fau.edu/class/esuccess/contact_us.php

Top Hat:

Should you require assistance with Top Hat at any time, due to the fact that they require specific user information to troubleshoot these issues, please contact their Support Team directly by way of email (support@tophat.com), the in app support button, or by calling 1-888-663-5491.

GRADING EVALUATION & COURSE ASSIGNMENTS

Note: your lowest Critical Thinking Assignment and Reading Questions (through Top Hat) and your lowest Quiz (through Canvas) grades will be **automatically dropped** at the end of the semester. If you have an emergency or forget to complete an assignment, this is your one-time excuse. You do not need to request

for it to be applied. Because you have one grade automatically dropped per category, your instructor will not reopen any missed grades! Do not request extensions!

Course Evaluation

Critical Thinking Assignments.....	30%
Reading Questions.....	10%
Module Quizzes.....	60%
Extra Credit.....	+5%

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.

Module Quizzes [60% of course grade] **lowest grade dropped*

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 [+5% of course grade] **cannot hurt your grade*

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. 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!

Grade Postings

All grades are listed in Canvas under Grades. You must always verify your grades are being posted properly by checking your grades after completing each module and keeping a printed copy of the score confirmation page displayed after submitting all assignments. You may also keep track of your grades through your Top Hat gradebook, which is periodically synced with your Canvas gradebook. In order for grades to post correctly, you must register for your Top Hat account using your official FAU email account.

COURSE POLICIES

Attendance Policy

Students are expected to attend all of 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 non-attendance.

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.

Since this course is delivered online, you are expected to access the course at least three times per week to ensure you do not miss pertinent postings, messages, or announcements. It is imperative that you meet course deadlines and stay active in discussion boards, group projects, etc. If you are experiencing major illnesses, absences due to university duties, or other large-scale issues, contact the instructor immediately to formulate a resolution (if possible).

University Approved Absence Policy Statement

In accordance with rules of the Florida Atlantic University, students have the right to reasonable accommodations to participate in University approved activities, including athletic or scholastics teams, musical and theatrical performances and debate activities. It is the student's responsibility to notify the course instructor at least one week prior to missing any course assignment.

Student Athletes

Athletes competing in sports this semester should be certain that their academic advisor is aware of the course assignment schedule and contacts the instructor as soon as possible if there are conflicts. Since all assignments can be completed online from any Internet connected computer, extensions are not generally provided for "away" games and competitions.

Communication Policy

Electronic mail is a critical communication tool in an online course! Please note that this course conforms to the FAU student email policy. All course-related email will be sent to your FAU email account. All students must regularly (at least three times weekly) access their FAU email accounts, Except for Saturdays, Sundays, and holidays, the Instructor or TA typically will respond to messages within 48 hours.

Code of Academic Integrity Policy Statement

Students at Florida Atlantic University should endeavor to maintain the highest ethical standards. Academic dishonesty is 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 to 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 fau.edu/ctl/4.001 [Code of Academic Integrity](#).

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 netiquette, which is proper or polite behavior on the internet. For more in-depth information, please see the [FAU statement on netiquette](#). 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 netiquette 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.

Disruptive Behavior Policy Statement

Disruptive behavior is defined in the FAU Student Code of Conduct as "... activities which interfere with the educational mission within classroom." Students who disrupt the educational experiences of other students and/or the instructor's course objectives in a face-to-face or online course are subject to disciplinary action. Such behavior impedes students' ability to learn or an instructor's ability to teach. Disruptive behavior may include, but is not limited to non-approved use of electronic devices (including cellular telephones); cursing or shouting at others in such a way as to be disruptive; or, other violations of an instructor's expectations for classroom conduct. For more information, please see the [FAU Office of Student Conduct](#).

Students with Disabilities

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 fau.edu/sas/.

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 counseling, support meetings, and psychiatric services, to name a few – offered to help improve and maintain emotional well-being. For more information, go to fau.edu/counseling/.

Religious Accommodation Policy Statement

In accordance with 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 with regard to admissions, registration, class attendance, and the scheduling of examinations and work assignments. For further information, please see [Academic Policies and Regulations](#).

Incomplete Grade Policy

A student who is passing a course, but has not completed all work due to exceptional circumstances, may, with consent of the instructor, temporarily receive a grade of incomplete ("I"). The assignment of the "I" grade is at the discretion of the instructor, but is allowed only if the student is passing the course. The specific time required to make up an incomplete grade is at the discretion of the instructor. However, the University policy on the resolution of incomplete grades requires that all work required to satisfy an incomplete ("I") grade must be completed within a period of time not exceeding one calendar year from the assignment of the incomplete grade. After one calendar year, the incomplete grade automatically becomes a failing ("F") grade.

Drops/Withdrawals

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.

* * *

The instructor reserves the right to adjust this syllabus as necessary.

COURSE SCHEDULE

Module	Dates	Topic	Assignments	Readings	Due
1	1/12 – 1/22	Introduction, Understanding Science	<ul style="list-style-type: none"> • XCR 1: South Florida Weather/Climate • Quiz 1 • Reading Questions Ch1 • CT Assignment Ch 1 	Ch 1	1/22
2	1/22 – 1/29	Energy in the Atmosphere	<ul style="list-style-type: none"> • Quiz 2 • Reading Questions Ch 3 • CT Assignment Ch 3 	Ch 3	1/29
3	1/29 – 2/05	Latitudinal radiation imbalance.	<ul style="list-style-type: none"> • Quiz 3 • Reading Questions Ch 2 • CT Assignment Ch 2 	Ch 2	2/05
4	2/05 – 2/12	Vertical Radiation Imbalance, The Hydrosphere.	<ul style="list-style-type: none"> • XCR 2: Seasons • Quiz 4 • Reading Questions Ch 4 • CT Assignment Ch 4 	Ch 4	2/12
5	2/12 – 2/19	Condensation & Temperature, Atmospheric Instability	<ul style="list-style-type: none"> • Quiz 5 • Reading Questions Ch 5 • CT Assignment Ch 5 	Ch 5	2/19
6	2/19 – 2/26	Precipitation, Atmospheric Pressure	<ul style="list-style-type: none"> • XCR 3: Climate Change • Quiz 6 • Reading Questions Ch 7 • CT Assignment Ch 7 	Ch 7	2/26
7	2/26 – 3/04	Global Circulation.	<ul style="list-style-type: none"> • Quiz • Reading Questions Ch • CT Assignment Ch 	Ch 6	3/04
8	3/04 – 3/18	Winds, Air Masses & Fronts	<ul style="list-style-type: none"> • Quiz 8 • Reading Questions Ch • CT Assignment Ch 8 	Ch 8	3/18
9	3/18 – 3/25	Severe Weather & Midlatitude Cyclones	<ul style="list-style-type: none"> • Quiz 9 • CT Assignment Ch 9a 	Ch 9	3/25
10	3/25 – 4/01	Tropical Cyclones	<ul style="list-style-type: none"> • Quiz 10 • Reading Questions Ch9 • CT Assignment Ch9b 	Ch 9	4/01
11	4/01 – 4/08	Climate Zones	<ul style="list-style-type: none"> • Quiz 11 • Reading Questions Ch 10 • CT Assignment Ch 10 	Ch 10	4/08
12	4/08 – 4/22	Climate Change	<ul style="list-style-type: none"> • XCR 4: Tornadoes • Quiz 12 • Reading Questions Ch 11 • CT Assignment Ch 11 	Ch 11	4/22