

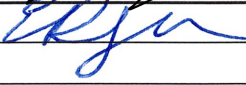
 FLORIDA ATLANTIC UNIVERSITY	NEW COURSE PROPOSAL Undergraduate Programs		UUPC Approval <u>2/26/24</u> UFS Approval _____ SCNS Submittal _____ Confirmed _____ Banner Posted _____ Catalog _____
	Department Geosciences College College of Science <i>(To obtain a course number, contact erudolph@fau.edu)</i>		
Prefix MET Number 3112	<i>(L = Lab Course; C = Combined Lecture/Lab; add if appropriate)</i> Lab Code	Type of Course <div style="border: 1px solid red; padding: 2px;">Lecture</div>	Course Title Tropical Climatology
Credits (See Definition of a Credit Hour) 3	Grading (Select One Option) Regular <input checked="" type="radio"/> Sat/UnSat <input type="radio"/>	Course Description (Syllabus must be attached; see Template and Guidelines) This course presents a comprehensive exploration of tropical climatology. The focus will be on the fundamental principles governing tropical weather and climate, the processes driving the circulation, severe weather events, and the pivotal role of the tropical climate in shaping global circulation patterns.	
Effective Date (TERM & YEAR) Fall 2024	Prerequisites, with minimum grade* MET 2010, D-		Corequisites Registration Controls (Major, College, Level)
*Default minimum passing grade is D-. Prereqs., Coreqs. & Reg. Controls are enforced for all sections of course			
WAC/Gordon Rule Course <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No WAC/Gordon Rule criteria must be indicated in syllabus and approval attached to proposal. See WAC Guidelines .		Intellectual Foundations Program (General Education) Requirement (Select One Option) None General Education criteria must be indicated in the syllabus and approval attached to the proposal. See Intellectual Foundations Guidelines .	
Minimum qualifications to teach course Masters degree (with 18 credit hours of relevant coursework).			
Faculty Contact/Email/Phone Yijie Zhu/yijiezhu@fau.edu/8138929674		List/Attach comments from departments affected by new course	
Approved by Department Chair <u></u> College Curriculum Chair <u></u> College Dean <u></u> UUPC Chair <u>Korey Sorge</u> Undergraduate Studies Dean <u>Dan Meeroff</u> UFS President _____ Provost _____		Date 1/31/24 2/15/24 <u>2/15/24</u> <u>2/26/24</u> <u>2/26/24</u> _____ _____	

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

MET 3112 – Tropical Climatology

Instructor: Yijie Zhu

Email: yijiezhu@fau.edu

Term: Fall 2024

Credit Hours: 3

Time; *Tue, Thurs 2pm-3:20pm*

Location: SE 4xx, Boca Raton

Office Hour: Thursday 3 pm-5 pm

INSTRUCTIONAL METHOD

In-Person

Traditional concept of in-person. Mandatory attendance is at the discretion of the instructor.

COURSE DESCRIPTION

This course presents a comprehensive exploration of tropical climatology. The focus will be on the fundamental principles governing tropical weather and climate, the processes driving the circulation, severe weather events, and the pivotal role of the tropical climate in shaping global circulation patterns.

COURSE OBJECTIVE

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

- Gain a solid understanding of the laws of weather and climate, radiation conditions in low latitudes, and the general circulation of the tropics.
- Understand seasonal variations in regional circulation systems in tropical regions, such as monsoons and El Niño-Southern Oscillation (ENSO).
- Recognize the formation, structure, and movement of tropical disturbances (e.g., hurricanes) and examine their impacts on tropical climates.
- Examine and analyze the influence of climate change on tropical climates.

COURSE PREREQUISITES

MET 2010

REQUIRED TEXTS/MATERIALS

No required textbook

Recommended readings:

Tropical Climatology: An Introduction to the Climates of the Low Latitudes, 2nd Edition

Wiley; 2nd edition (April 9, 1998)

ISBN-10 : 0471966118

COURSE EVALUATION METHOD

<i>Module Quizzes</i>	30%
<i>Midterm Exam</i>	20%

<i>Reading Assignment</i>	20%
<i>Final Exam</i>	30%
<i>Extra Credit</i>	+2%

1. Module Quizzes

A total of six module quizzes will be delivered throughout the semester. These module quizzes are designed to help students keep track of the course material.

2. Midterm Exam

A closed-book exam will be held during the regular class time. It will be a mix of multiple-choice and short answers.

3. Reading Assignment

The instructor will provide the most updated research proceedings with topics on the tropical climate. Students will be asked to summarize and find connections among the articles.

4. Final Exam

A closed-book exam will be held during the last class of the semester. It will be a mix of multiple-choice and short answers.

GRADING SCALE

A:	>92%	C	73-76%
A-:	90-92%	C-	70-72%
B+:	87-89%	D+	67-69%
B	83-86%	D	63-66%
B-	80-82%	D-	60-62%
C+	77-79%	F	<60%

LATE ASSIGNMENTS POLICY

Assignments will be deducted 5% for each day that they are late unless arranged in advance and with good reason. Also, note that grades of Incomplete (“I”) are reserved for students who are passing a course but have not completed all the required work because of exceptional circumstances.

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 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.

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/.

CLASS COMPUTER USE

During classes, computers should only be used for class-related activities. Use of email, social media, online shopping, internet surfing etc is not allowed. This policy is strictly enforced and the instructor reserves the right to grade penalize students who transgress.

PERSONAL LAPTOP USE

Students may use their own laptops in place of the desktop lab computers, subject to the same limitations regarding note-taking, internet use etc noted above.

CLASSROOM ETIQUETTE POLICY

University policy on the use of electronic devices states: "In order to enhance and maintain a productive atmosphere for education, personal communication devices, such as cellular telephones and pagers, are to be disabled in class sessions."

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 <https://www.fau.edu/counseling/>

HONOR CODE POLICY STATEMENT

Students at Florida Atlantic University are expected to maintain the highest ethical standards. Academic dishonesty, including cheating and plagiarism, 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 at <https://www.fau.edu/ctl/documents/4.001-code-of-academic-integrity.pdf>

COURSE SCHEDULE *(subject to revision)*

Class	Topic	Event
Week 1 08/20, 08/22	1. Course Introduction 2. The importance of Tropical Climates	
Week 2 08/27, 08/29	The Laws of Weather and Climate	Module 1 Quiz Due 08/30@11:59pm
Week 3 09/03, 09/05	Radiations in the Low Latitudes	
Week 4 09/10, 09/12	Tropical Temperature Variations	Module 2 Quiz Due 09/13@11:59pm
Week 5 09/17, 09/19	General Circulation of the Tropics	
Week 6 09/24, 09/26	Non-Seasonal Variations of the Circulation	Module 3 Quiz Due 09/27@11:59pm
Week 7 10/01, 10/3	Monsoon	
Week 8 10/08, 10/10	1. Mid-Term Review 2. Mid-Term Exam	
Week 9 10/15, 10/17	Water in the Tropical Atmosphere	
Week 10 10/22, 10/24	Tropical Disturbances	Module 4 Quiz Due 10/25@11:59pm
Week 11 10/29, 10/31	Tropical Climates	
Week 12 11/05, 11/07	Regional Influences	Module 5 Quiz Due 11/08@11:59pm
Week 13 11/12, 11/14	Weather and Climate in Florida	
Week 14 11/19, 11/21	Climate Change	Module 6 Quiz Due 11/22@11:59pm
Week 15 11/26, 11/28	1. Tools and Techniques in Climatological Research 2. No Class (Thanksgiving)	Reading Assignment Due 11/26 @11:59pm
Week 16 12/03, 12/05	1. Final Exam Review 2. Final Exam	