# **BROADCAST METEOROLOGY**

Meteorology is the study of the physics, chemistry, and dynamics of the earth's atmosphere and its interaction with the land surface and oceans. It is the underlying science of weather, climate, weather forecasting, climate projection, and their applications to decision-making activities. Fundamental topics include the composition, structure, and forces that govern the motion of the atmosphere.

# **About this Program**

- College: Liberal Arts and Sciences (http://catalog.ufl.edu/UGRD/colleges-schools/UGLAS/)
- Degree: Bachelor of Science
- Specializations: Applied Meteorology, Hazards, and Global Change (http://catalog.ufl.edu/UGRD/colleges-schools/UGLAS/MET\_BS/MET\_BS01/) | Broadcast Meteorology (p. 1) | General Atmospheric Science (http://catalog.ufl.edu/UGRD/colleges-schools/UGLAS/MET\_BS/MET\_BS03/)
- · Credits for Degree: 120

To graduate with this major, students must complete all university, college, and major requirements.

#### **Department Information**

The Geography Department offers a range of topics in contemporary geography and geospatial science, rich and lively cultural and learning environments, BA and BS undergraduate degrees, MA, M.S., and PhD degrees, as well as the largest Medical Geography program in the United States. **Website (https://geog.ufl.edu/)** 

#### CONTACT

Email (liangmao@ufl.edu) | 352.392.0494 (tel) | 352.392.8855 (fax)

P.O. Box 117315 330 Newell Drive 3141 TURLINGTON HALL GAINESVILLE FL 32611-7315 Map (http://campusmap.ufl.edu/#/index/0267)

#### Curriculum

- Combination Degrees
- · Geographic Artificial Intelligence and Big Data Certificate
- Geography
- Geography Minor
- Geography Minor UF Online
- Geography UF Online
- Geospatial Information Analysis Certificate
- Medical Geography Certificate
- · Medical Geography in Global Health Minor
- Meteorology and Climatology Certificate

A major in Meteorology enables students to know the composition, structure, and motion of the Earth's atmosphere as governed by laws of physics, energy, and chemistry, and to understand its relationship with Earth and human systems. Students will learn how observations, data collection, and prediction are applied in the subfields of meteorology. Computer-based lab assignments teach students how to analyze meteorological information using diagnostic, prognostic, and technological tools and to apply data to solve problems. They will be able to interpret and effectively communicate information using maps, graphs, and/or statistics.

The specializations prepare students for a range of careers. Meteorologists continue to engage in creating weather forecasts and climate projections, communicating those forecasts and projections, and conducting research. Increasingly, a number of private sector industries are looking to meteorologists to improve or create new products and services.

# BS Meteorology | Broadcast Meteorology

This specialization prepares students to use meteorological tools involved in forecasting and to communicate that forecast in a broadcast setting. It combines the fundamental meteorology courses with a number of courses from the College of Journalism and Mass Communication.

# **COURSEWORK FOR THE MAJOR**

The Meteorology major has three different specializations: BS | Meteorology, Applied Meteorology, Hazards, and Global Change; BS Meteorology | General Atmospheric Sciences; and BS | Meteorology, Broadcast Meteorology.

Students in all specializations must complete the following Meteorology Core courses:

#### **Meteorology Core Courses**

Code	Title	Credits
GEO 3250	Climatology	3
MET 1010	Introduction to Weather and Climate	3
MET 3503	Weather and Forecasting	3
MET 4230	Thermodynamics of the Atmosphere	3
MET 4410	Radar and Satellite Meteorology	3
MET 4500C	Synoptic Meteorology	4
MET 4524	Weather Briefing	1
MET 4950	Capstone in Meteorology	1
Total Credits		21

#### **Electives**

The BS | Meteorology, Broadcast Meteorology specialization requires 52-54 credits of coursework in the major plus 27 credits of related coursework.

In addition to the 21 credit hours of required Core Meteorology courses:

Code	Title	Credits
Complete all Meteorology T	heory Courses:	13
MET 4301	Atmospheric Dynamics 1	
MET 4450	Atmospheric Physics	
MET 4531	Mesoscale Meteorology	
Complete all Broadcast Met	57	15
JOU 2100	Broadcast Writing Bootcamp	
JOU 4201	News Center Practicum (Broadcast Meteorology Anchor)	
JOU 4201	News Center Practicum (Intro to Broadcast Meteorology)	
RTV 3303	Audio News and Reporting	
RTV 4301	TV News Reporting	
RTV 4681	Advanced TV News Reporting	
Select one Societal Applica	tions course:	3-4
GEO 2006	Natural Hazards Geography	
GEO 3222	Sea Level Science	
GEO 3280	Principles of Geographic Hydrology	
GEO 3334	Managing for a Changing Climate	
GEO 3341	Extreme Floods	
GEO 3343	Extreme Droughts	
GEO 4034	Weather, Climate, and Society	
GEO 4033	Climate Change and Health	
GEO 4170	Communicating Science in the Geosciences	
GEO 4285	Water, Risk, and Extreme Events	
GLY 3074	Oceans and Global Climate Change	
Select one Programming co	burse:	3-4
AST 2730	Introduction to Python for Physical Sciences	
COP 3275	Computer Programming Using C	
GIS 3043	Foundations of Geographic Information Systems	
GIS 4102C	GIS Programming	
GIS 4124	Geocomputation using R Programming	
GIS 4324	GIS Analysis of Hazard Vulnerability	
MET 3753	Pragmatic Python for Weather	
STA 3100	Programming With Data in R	
Total Credits		34-36
Total Credits		
Code	Title	Credits
Mataoralagy Cara Courses		21

Code	litte	Credits
Meteorology Core Courses		21
Electives		34-36
Total Credits		55-57

#### **Related Coursework**

Code	Title	Credits
CHM 2045	General Chemistry 1	4
& 2045L	and General Chemistry 1 Laboratory	
MAC 2311	Analytic Geometry and Calculus 1	4
MAC 2312	Analytic Geometry and Calculus 2	4
MAC 2313	Analytic Geometry and Calculus 3	4
PHY 2048	Physics with Calculus 1	4
& 2048L	and Laboratory for Physics with Calculus 1	
PHY 2049	Physics with Calculus 2	4
& 2049L	and Laboratory for Physics with Calculus 2	
STA 2023	Introduction to Statistics 1	3
Total Credits		27

#### **Critical Tracking**

Critical Tracking records each student's progress in courses that are required for entry to each major. Please note the critical-tracking requirements below on a per-semester basis.

For degree requirements outside of the major, refer to CLAS Degree Requirements: Structure of a CLAS Degree (https://catalog.ufl.edu/UGRD/colleges-schools/UGLAS/#degreerequirementstext).

Equivalent critical-tracking courses as determined by the State of Florida Common Course Prerequisites (http://www.flvc.org/cpp/displayRecord.jsp? cip=450701&track=01) may be used for transfer students.

# Semester 1

• 2.0 UF GPA required

### Semester 2

• 2.0 UF GPA required

# Semester 3

- Complete one Meteorology Core course and one MAC course.
- 2.0 UF GPA required

# Semester 4

- 2.5 critical-tracking GPA required
- Complete one additional Meteorology Core course and CHM 2045/CHM 2045L and PHY 2048/PHY 2048L.
- 2.0 UF GPA required

# Semester 5

- Complete one additional Meteorology Core course.
- 2.5 critical-tracking GPA required
- 2.0 UF GPA required

# Semester 6

• 2.0 UF GPA required

# Semester 7

• 2.0 UF GPA required

# Semester 8

- Complete all of the remaining MET 3000/4000 courses.
- 2.0 UF GPA required

#### **Model Semester Plan**

Students are expected to complete the Writing, Civic Literacy, summer enrollment, and Quest requirements while in the process of taking the courses below. Students are also expected to complete the General Education International and Diversity requirements concurrently with another General Education requirement (typically, Composition, Humanities, or Social and Behavioral Sciences) as part of the CLAS Basic Distribution requirements. One of the two General Education Mathematics courses must be a pure math course.

Up to 3 hours of approved Meteorology electives that are not MET, GEO, or GIS courses may also count towards the 3000 level or above electives outside of the major.

To remain on track, students must complete the appropriate critical-tracking courses, which appear in bold. These courses must be completed by the terms as listed on the Critical Tracking tab.

This semester plan represents an example progression through the major. Actual courses and course order may be different depending on the student's academic record and scheduling availability of courses. Prerequisites still apply.

Course	Title	Credits
Semester One MET 1010	Introduction to Weather and Climate (Critical Tracking: Can Ed Dhysical Sciences)	3
CHM 2045	Introduction to Weather and Climate ( <b>Critical Tracking</b> ; Gen Ed Physical Sciences) General Chemistry 1	4
& 2045L	and General Chemistry 1 Laboratory ( <b>Critical Tracking</b> ; State Core Gen Ed Physical Sciences)	4
	1	
MAC 2311	Analytic Geometry and Calculus 1 (Critical Tracking; State Core Gen Ed Mathematics)	4
	/catalog.ufl.edu/UGRD/academic-programs/general-education/#genedcoursestext); Writing	3
Requirement		
o	Credits	14
Semester Two		2
Quest 1 (Gen Ed Humanities) GEO 3250	Olimetalary (Can Ed Ulymanitica)	3
	Climatology (Gen Ed Humanities)	3
JOU 2100 MAC 2312	Broadcast Writing Bootcamp	1
	Analytic Geometry and Calculus 2 (Critical Tracking; Gen Ed Mathematics)	4
PHY 2048	Physics with Calculus 1	4
& 2048L	and Laboratory for Physics with Calculus 1 (Critical Tracking)	15
Semester Three	Credits	15
MAC 2313	Analytic Geometry and Calculus 3	4
MAC 2313 MET 3503	Weather and Forecasting	3
PHY 2049	Physics with Calculus 2	4
& 2049L	and Laboratory for Physics with Calculus 2	4
Gen Ed Biological Science <sup>2</sup>	and Laboratory for Frigsics with Calculus 2	3
Gen Ed Social and Behavioral Sciences	2	3
Self Ed Social and Benavioral Sciences	Credits	17
Semester Four		
MET 4301	Atmospheric Dynamics 1	4
RTV 3303	Audio News and Reporting	3
STA 2023	Introduction to Statistics 1 (Gen Ed Mathematics)	3
Societal Applications or Programming		3
	al Sciences (http://catalog.ufl.edu/UGRD/academic-programs/general-education/	3
#genedcoursestext)	· · · · · · · · · · · · · · · · · · ·	
<u> </u>	Credits	16
Semester Five		
MET 4410	Radar and Satellite Meteorology	3
MET 4500C	Synoptic Meteorology	4
RTV 4301	TV News Reporting	3
Foreign language		5
	Credits	15
Semester Six		
MET 4531	Mesoscale Meteorology	3
RTV 4681	Advanced TV News Reporting	3
Internship or MET4911 (Recommended	()	1
Gen Ed Composition: Writing requireme	ent	3
Foreign Language		5
	Credits	15

Semester Seven		
JOU 4201	News Center Practicum	2
MET 4230	Thermodynamics of the Atmosphere	3
MET 4524	Weather Briefing	1
Gen Ed Humanities		3
Gen Ed Biological Sciences		3
Societal Applications or Programming	course	3
	Credits	15
Semester Eight		
JOU 4201	News Center Practicum (Broadcast Meteorology Anchor)	3
MET 4450	Atmospheric Physics	3
MET 4950	Capstone in Meteorology (Critical Tracking)	1
State Core Gen Ed Humanities (http://catalog.ufl.edu/UGRD/academic-programs/general-education/#genedcoursestext)		3
Gen Ed Social and Behavioral Sciences		3
	Credits	13
	Total Credits	120

Natural science laboratory: A one-credit science lab with a minimum grade of C is required. Students can elect a laboratory course that is approved for the general education physical or biological sciences requirement or any psychology laboratory. (Most laboratory courses cannot be taken without prerequisite or corequisite courses.)

<sup>2</sup> One General Education option taken this term must be a Quest 2 course.