

COURSE IMPLEMENTATION DATE: Fall 1994  
 COURSE REVISED IMPLEMENTATION DATE: April 2005  
 COURSE TO BE REVIEWED: April 2009  
 (Four years after implementation date) (MONTH YEAR)

**OFFICIAL COURSE OUTLINE INFORMATION**

Students are advised to keep course outlines in personal files for future use.  
 Shaded headings are subject to change at the discretion of the department and the material will vary  
 - see course syllabus available from instructor

FACULTY/DEPARTMENT:	Geography Department	
<b>GEOG 201</b>		<b>4</b>
COURSE NAME/NUMBER	FORMER COURSE NUMBER	UCFV CREDITS
<b>Introduction to Climatology</b>		
COURSE DESCRIPTIVE TITLE		

**CALENDAR DESCRIPTION:**

This course is a survey course in introductory climatology. Lecture topics range from the micro-scale (air pollution), to meso-scale (urban heat island), to synoptic-scale (tropical cyclones), and global-scale (climatic change).

PREREQUISITES: **GEOG 101**  
 COREQUISITES:

SYNONYMOUS COURSE(S)	<b>SERVICE COURSE TO:</b>
(a) Replaces: _____ (Course #)	_____
(b) Cannot take: _____ for further credit. (Course #)	_____

TOTAL HOURS PER TERM:	<b>75</b>	TRAINING DAY-BASED INSTRUCTION
<b>STRUCTURE OF HOURS:</b>		LENGTH OF COURSE: _____
Lectures: <b>45</b> Hrs		HOURS PER DAY: _____
Seminar: _____ Hrs		
Laboratory: <b>30</b> Hrs		
Field Experience: _____ Hrs		
Student Directed Learning: _____ Hrs		
Other (Specify): _____ Hrs		

MAXIMUM ENROLLMENT:	<b>25</b>
EXPECTED FREQUENCY OF COURSE OFFERINGS:	<b>Once per year</b>
<b>WILL TRANSFER CREDIT BE REQUESTED? (lower-level courses only)</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>WILL TRANSFER CREDIT BE REQUESTED? (upper-level requested by department)</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>TRANSFER CREDIT EXISTS IN BCCAT TRANSFER GUIDE:</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

**AUTHORIZATION SIGNATURES:**

Course Designer(s): _____ Steven Marsh	Chairperson: _____ Raymond Welch (Curriculum Committee)
Department Head: _____ Dr. Sandy Vanderburgh	Dean: _____ Dr. Virginia Cooke
PAC Approval in Principle Date: _____	PAC Final Approval Date: April 29, 2005

**LEARNING OBJECTIVES / GOALS / OUTCOMES / LEARNING OUTCOMES:**

Students will:

- 1) be introduced to the basic scientific principles that modern climatology is based upon and physical, dynamic, and applied climatology at all spatial scales,
- 2) be able to demonstrate an understanding of basic atmospheric radiation theory and application to microclimate modification, thermodynamics and moisture, precipitation processes, atmospheric motion, frontal theory, general circulation of the atmosphere, tropical climatology, and global climate change.

**METHODS:**

The format of the course will typically include lectures, assigned readings, laboratory sessions and assignments, discussion groups, oral presentations, field trips, and guest speakers. Lecture topics will emphasize conceptual and theoretical issues and will be supplemented by the use of audio visual aids throughout the course. Laboratory assignments will emphasize advanced techniques in the analysis and interpretation of meteorological and climatological data.

**PRIOR LEARNING ASSESSMENT RECOGNITION (PLAR):**

Credit can be awarded for this course through PLAR (Please check:)  Yes  No

**METHODS OF OBTAINING PLAR:**

Challenge exams and/or portfolio evaluation.

**TEXTBOOKS, REFERENCES, MATERIALS:**

[Textbook selection varies by instructor. An example of texts for this course might be:]

Ahrens, C.D., 2003. Meteorology Today. An Introduction to Weather, Climate, and the Environment. 7<sup>th</sup> Edition. Brooks/Cole: Pacific Grove.

**SUPPLIES / MATERIALS:**

**STUDENT EVALUATION:**

[An example of student evaluation for this course might be:]

Assignments and reports 40-60%  
Exams 40-60%

**COURSE CONTENT:**

[Course content varies by instructor. An example of course content might be:]

Lecture Topics:

1. Energy and Radiation
2. Energy Balance and Temperature
3. Atmospheric Thermodynamics and Humidity
4. Clouds and Precipitation
5. Atmospheric Statics and Dynamics
6. Global Wind Systems
7. Air Masses and Fronts
8. Middle Latitude Cyclones
9. Global Climate
10. Severe Weather
11. Urban Heat Island
12. Climate Change