



COURSE IMPLEMENTATION DATE: Fall 1994  
 COURSE REVISED IMPLEMENTATION DATE: September 2010  
 COURSE TO BE REVIEWED: January 2014  
*(four years after UPAC approval)* *(month, year)*

**OFFICIAL UNDERGRADUATE 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 – see course syllabus available from instructor

GEOG 201	Geography	4
COURSE NAME/NUMBER	FACULTY/DEPARTMENT	UFV CREDITS
Introduction to Climatology		
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:  
 PRE or COREQUISITES:

**SYNONYMOUS COURSE(S):**

- (a) Replaces: \_\_\_\_\_
- (b) Cross-listed with: \_\_\_\_\_
- (c) Cannot take: \_\_\_\_\_ for further credit.

**SERVICE COURSE TO:** *(department/program)*

**TOTAL HOURS PER TERM:** 75

**STRUCTURE OF HOURS:**

Lectures: 45 Hrs  
 Seminar: \_\_\_\_\_ Hrs  
 Laboratory: 30 Hrs  
 Field experience: \_\_\_\_\_ Hrs  
 Student directed learning: \_\_\_\_\_ Hrs  
 Other (specify): \_\_\_\_\_ Hrs

**TRAINING DAY-BASED INSTRUCTION:**

Length of course: \_\_\_\_\_  
 Hours per day: \_\_\_\_\_

**OTHER:**

Maximum enrolment: 25  
 Expected frequency of course offerings: Once every year  
*(every semester, annually, every other year, etc.)*

WILL TRANSFER CREDIT BE REQUESTED? (lower-level courses only)  Yes  No  
 WILL TRANSFER CREDIT BE REQUESTED? (upper-level requested by department)  Yes  No  
 TRANSFER CREDIT EXISTS IN BCCAT TRANSFER GUIDE:  Yes  No

Course designer(s): <u>Steven Marsh</u>	Date approved: <u>November 2009</u>
Department Head: <u>Dr. Ken Brealey</u>	Date of meeting: <u>November 27, 2009</u>
Supporting area consultation (Pre-UPAC)	Date approved: <u>January 2010</u>
Curriculum Committee chair: _____	Date approved: <u>January 2010</u>
Dean/Associate VP: <u>Dr. Jacqueline Nolte</u>	Date of meeting: <u>January 29, 2010</u>
Undergraduate Program Advisory Committee (UPAC) approval	

**LEARNING OUTCOMES:**

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

1. Discuss and explain the basic scientific principles that modern climatology is based upon, including physical, dynamic, and applied climatology at all spatial scales.
2. Theoretically and experimentally master the knowledge of basic atmospheric radiation theory and its application to microclimate modification, thermodynamics and moisture, precipitation processes, atmospheric motion, frontal theory, general circulation of the atmosphere, tropical climatology, severe thunderstorms, and global climate change.
3. Demonstrate an acquaintance with the findings of contemporary research topics in climatology.

**METHODS:** *(Guest lecturers, presentations, online instruction, field trips, etc.)*

The format of the course will 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.

**METHODS OF OBTAINING PRIOR LEARNING ASSESSMENT RECOGNITION (PLAR):**

Examination(s)                       Portfolio assessment                       Interview(s)

Other (specify):

PLAR cannot be awarded for this course for the following reason(s):

**TEXTBOOKS, REFERENCES, MATERIALS:**

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

Aguado, Edward and James E. Burt, 2010. Understanding Weather and Climate Fifth Edition. Upper Saddle River, NJ: Pearson Education Inc.

**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