

COURSE IMPLEMENTATION DATE: Fall 1997
 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	
GEOG 401		4
COURSE NAME/NUMBER	FORMER COURSE NUMBER	UCFV CREDITS
	Global Climatology	
COURSE DESCRIPTIVE TITLE		

CALENDAR DESCRIPTION:

Global Climatology is an advanced course in the global climate system and the examination of past, present, and possible future climatic scenarios. Environmental and socio-economic impacts of nuclear winter, ozone holes, global warming, and policy responses will also be addressed.

PREREQUISITES: **GEOG 201 and MATH 104 or 106**
 COREQUISITES: **None**

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

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

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

AUTHORIZATION SIGNATURES:

Course Designer(s): _____ Steven Marsh	Chairperson: _____ Raymond Welch (<i>Curriculum Committee</i>)
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:

Upon successful completion of the course the student will be able to:

- 1) demonstrate an advanced understanding of the global climate system,
- 2) critically analyze both the scientific evidence and scientific uncertainties of global climate change,
- 3) understand the human impacts of global climate change.

METHODS:

The format of the course typically includes lectures, assigned readings, class assignments, discussion groups, oral presentations, field trips, and guest speakers. Lecture topics emphasize conceptual and theoretical issues and are supplemented by the use of audio visual aids throughout the course. Laboratory assignments emphasize both the application of climatological data, and the impacts of global change.

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:]

Hartmann, Dennis L., 1994. Global Physical Climatology. Academic Press: San Diego.

Harvey, L.D.D., 2000. Climate and Global Environmental Change. Toronto: Prentice Hall.

SUPPLIES / MATERIALS:

STUDENT EVALUATION:

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

Assignments, presentations, reports 40-60%

Exams 40-60%

COURSE CONTENT:

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

Lecture Topics:

1. Global Energy Balance
2. Global Water Balance
3. Atmospheric General Circulation
4. Ocean General Circulation
5. Past Climates
6. Climate Feedback Mechanisms
7. Global Climate Models
8. Natural Climate Change
9. Anthropogenic Climate Change
10. The Future