



COURSE IMPLEMENTATION DATE: 1997
 COURSE REVISED IMPLEMENTATION DATE: February 2013
 COURSE TO BE REVIEWED: February 2019
(six years after UEC 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 401	Geography	4
COURSE NAME/NUMBER	FACULTY/DEPARTMENT	UFV 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 one of STAT 104 (formerly MATH 104) or STAT 106 (formerly MATH 106).
 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:	<u>45</u>	Hrs
Seminar:	_____	Hrs
Laboratory:	<u>30</u>	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 other 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): _____	Date approved: <u>November 2012</u>
Department Head: <u>Michelle Rhodes</u>	Date of meeting: _____
Campus-Wide Consultation (CWC)	Date approved: _____
Curriculum Committee chair: _____	Date approved: _____
Dean/Associate VP: <u>Ora Steyn</u>	Date of meeting: _____
Undergraduate Education Committee (UEC) approval	Date of meeting: _____

COURSE NAME/NUMBER**LEARNING OUTCOMES:**

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

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

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

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.

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:

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