

**BIOL 6000 Topics in Biology I: Climate Change Biology**  
**SECTION A**  
**Junemester 2013**  
**DEPT. OF BIOLOGY;**  
**COLLEGE OF ARTS & SCIENCES;**  
**VALDOSTA STATE UNIV.**  
**CREDIT HOURS: 3**

**INSTRUCTOR:** Dr. Matthew Waters

**OFFICE:** BSC 1106

**OFFICE HOURS –**

**PHONE –** 333-5760 (229-328-6007)

**EMAIL:** [mwaters@valdosta.edu](mailto:mwaters@valdosta.edu)

**LECTURE HOURS:** MTWRF 2-4:50 PM, Bailey 1024

**REQUIRED TEXT:** Climate Change Biology by Lee Hannah, Academic Press  
ISBN: 0123741820

**COURSE DESCRIPTION:** An overview of climate change, how biological organisms are used to study past climate change, and how climate change affects biological organisms in recent time periods. Prerequisites: BIOL 1107 and BIOL 1108 OR either BIOL 1107/1108 and GEOG 3150 OR permission of the instructor.

**COURSE OBJECTIVES/EDUCATIONAL OUTCOMES:**

Valdosta State University (VSU) Department of Biology educational outcomes for this course include: numbers 1, 2, 3 (in part), and 5. University (VSU) educational outcomes for this course include: numbers 3, 4, 5, 7, and 8.

**COURSE POLICIES**

You are expected to attend all lectures. If a lecture is missed, **you** are responsible for obtaining any notes and handouts given that day. Reading of the appropriate lecture chapters and any lab materials should be completed **prior** to coming to class.

**Assigned text material** may be on the lecture exams; I will inform you during lecture as to the specific topics, tables, figures, and/or text pages for which you will be responsible.

**Midterm: May 21** is the last day to drop the class with a passing grade (WP) regardless of your point total. You cannot drop the class after midterm unless there are extenuating circumstances that must be acceptable to the Professor, Biology Department Head, Dean of Arts and Sciences, and the Vice President for Academic Affairs.

**TENTATIVE LECTURE SCHEDULE:**

**TOPIC**

**Text Chapters**

**Climate Primer**

Green house planet

1

Black body radiation, green house gases

**Chemistry of Climate Change**

1

Isotopes, green house gas production,  
Ozone, atmospheric layering

## LECTURE EXAMS:

Lecture exams will be essay, short answer, and vocabulary definitions. Exams are not strictly comprehensive, although you will need to know the previous material to answer some questions on the future exam(s). Later topics and concepts build on previously discussed material; thus, the course is much like a story that builds on previous chapters.

**Final grades are determined as a percentage of total points possible (400):**

**450 and above (90-100%) =A**

**400-450 (80-89%) =B**

**350-399 (70-79%) =C**

**300-349 (60-69%) =D**

**299 and below (below 60%) =F**

**Extra Credit: I DO NOT** give extra credit. Please do not ask!

## GRADING POLICIES/ASSESSMENT

### Lecture:

A. Three (3) lecture exams will be given during the semester, including the final exam. The final exam will **not** be strictly comprehensive (as noted earlier). Each exam is worth 100 points **Make-up exams are not an automatic right;** you must notify me within **24** hours of the missed exam, and provide a **valid reason**, or you will forfeit your opportunity for a make-up. The professor is the final judge of what is an acceptable excuse. You can only make up **one** exam.

B. We will read multiple articles from the current literature. I will provide a sheet used to assess the students reading of the papers. These sheets must be turned in at the beginning of the class that the article is discussed and will not be accepted during or after class.

C. Students will be assessed on responses to reflection questions and journal entries maintained throughout the semester. Also, class participation is measured on the student's participation in discussions and small groups question times.

D. Graduate students will submit a written mini-grant proposal to conduct similar research as we have studied in the class. Effort will be made to include the graduate student's chosen field of research if possible. Papers should not exceed 10-pages. Instead of a paper, graduate students can give a 30 minute seminar outlining 3 key papers and their proposal. Decision to do a paper or presentation needs to be made by Midterm.

Grades:	3 Tests (100 points)	300
	Journal reflection papers	50
	Other	50
	Proposal	100
Grade Total		500

