

Introduction to Climate Studies Syllabus

MET1104, Summer 2021, May17 - June 18

Course & Instructor Information

Instructor: Dr. Laura Nesor

Office Hours: By Appointment

Contact Hours: 45

Credits: 3

Course Description

This is a three credit hour general education course with no prerequisites. This course explores the scientific principles that govern the Earth's climate, climate change and variability and its implications for society. It will also examine the relationship between climate and human activities. Topics include global warming, sea-level changes, past climates, types of climate, climate policy, and more.

Textbook Information

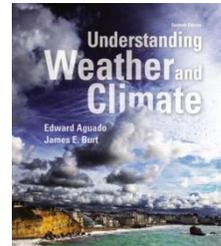
No text is required. Your Instructor will provide you with all materials from the text shown below

Understanding Weather and Climate 7th Edition

Author: Edward Aguado and James E. Burt

ISBN-13: 978-0-321-98730-3; ISBN-10: 0-321-98730-6

The usage of the textbook is recommended.



Measurable Course Objectives

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

- Understand the scientific method and its use pertaining to climate change science
- Describe broad measurements relating to climate including land and sea

temperatures, ice cover, sea levels, plant and animal migratory patterns, and species extinctions

- Understand climate change science in relation to Earth science
- Examine Earth's atmosphere including its composition, structure, and circulation patterns, and understand how various greenhouse gases affect it
- Compare the forcing mechanisms that bring about climate change and variability
- Identify extreme atmospheric events that have occurred due to climate change
- Describe the effect of climate on the structure, salinity, temperature, and circulation of the world ocean
- Demonstrate knowledge of how scientists investigate the spatial and temporal characteristics of climate, climate variability, and climate change
- Compare the methods scientists use in reconstructing the climatic history of Earth and projecting future climates
- Examine human efforts to mitigate and adapt to climate change

Collegewide Student Learning Outcomes

The Collegewide Student Learning Outcomes assessed and reinforced in this course include the following:

- Critical Thinking
- Scientific and Quantitative Reasoning
- Information Literacy
- Global Sociocultural Responsibility

Attendance/Makeup Policy

The College recognizes the correlation between attendance and both student retention and achievement. Per College Policy 3.060. **Students are expected to participate in all online assignments of all courses for which they are registered.**

You will be allowed to make up work for full credit only under extreme circumstances (such as a documented, serious health-related emergency).

Late assignment policy for quizzes and "Give it Some Thought" exercises (NOT applicable for exams):

- No penalty if the student submits the assignment within 12 hours of the deadline.
- After the 12-hour mark, there is a 10% deduction on the assignment grade for the next 24 hours.
- For every day that follows, there is a 20% deduction from the assignment grade.
- At the five-day mark past the original deadline, it is automatically recorded as a zero even if submitted after that point.
- After the 5-day mark, make-up work or late assignments are only allowed for credit if the student has a documented, serious emergency. You will be allowed to make up work for full credit only under extreme circumstances.

Exams cannot be submitted past their due date; in the case of a documented, serious emergency, an alternate make-up exam may be assigned by the professor.

Cheating will not be tolerated. This includes giving or receiving aid on a quiz or exam and plagiarizing the work of others (including your classmates). There will likely be homework or class work that will allow for collaboration, but all work you turn in must be in your own words.

Grading Policy

Your final grade in this course is based upon performance on four non-cumulative examinations (12% each, 48% of total grade), a cumulative final exam (15% of total grade), and in daily work (quizzes and Give It Some Thought exercises, 37% of total grade).

Reading assignments

“Give It Some Thought” exercises will be based on reading assignments as the course progresses.

Quizzes

Quizzes may be announced or unannounced and will be given throughout the term.

Exams

Exams will consist of multiple choice, fill in the blank, and labeling questions. Exams primarily concern material covered since the most recent exam; however, they may include some cumulative material from earlier in the term.

Grading Scale

A = 90-100%

B = 80-89%

C = 70-79%

D = 60-69%

F = Below 60%

“**A**” grades are given for outstanding work. You are doing extremely well. The student has exceeded expectation.

“**B**” grades are given for above average work. You are doing very well. Improvements will be toward higher refinements of concept.

“**C**” grades are given for average work. You are meeting an acceptable level or expectation. Improvements will be towards acceptable levels of project requirements.

“**D**” grades are given for below average work. You are under-achieving in quality and/or motivation. Improvements will be towards acceptable level of project requirements.

“**F**” grades are given for failure. You are not reaching the expected level for college work. Improvements are to review goals, seek assistance and increase efforts.

Course Outline

Please note that the schedule is meant to give an overview of the major concepts of this course. Changes may occur in this calendar as needed to aid in the student’s development.

Week 1:

- Introduction to Class
- Part 1 Energy and Mass
- Exam 1

Week 2:

- Part 2 Water in the Atmosphere
- Part 3 Distribution and Movement of Air
- Exam 2

Week 3:

- Part 3 (continued) Distribution and Movement of Air

- Part 4 Disturbances
- Exam 3

Week 4:

- Part 5 Weather Forecasting and Human Impacts on the Atmosphere
- Part 6 Current, Past, and Future Climates
- Exam 4

Week 5:

- Part 6 (continued) Current, Past, and Future Climates
- Part 7 Atmospheric Optics
- Final Exam

Academic Integrity

As members of the Seminole State College of Florida community, students are expected to be honest in all of their academic coursework and activities.

Academic dishonesty, such as cheating of any kind on examinations, course assignments or projects, plagiarism, misrepresentation and the unauthorized possession of examinations or other course-related materials, is prohibited.

Plagiarism is unacceptable to the college community. Academic work that is submitted by students is assumed to be the result of their own thought, research or self-expression. When students borrow ideas, wording or organization from another source, they are expected to acknowledge that fact in an appropriate manner. Plagiarism is the deliberate use and appropriation of another's work without identifying the source and trying to pass-off such work as the student's own. Any student who fails to give full credit for ideas or materials taken from another has plagiarized.

Students who share their work for the purpose of cheating on class assignments or tests are subject to the same penalties as the student who commits the act of cheating.

When cheating or plagiarism has occurred, instructors may take academic action that ranges from denial of credit for the assignment or a grade of "F" on a specific assignment, examination or project, to the assignment of a grade of "F" for the course. Students may also be subject to further sanctions imposed by the judicial officer, such as disciplinary probation, suspension or dismissal from the College.