

Midland College Syllabus

2022 - 2023

GEOL 1447

Meteorology Lecture

4 Semester Credit Hours

(3 Lecture/3 Lab)

Core Curriculum Course

Instructor Information:

Instructor: [Click here to enter text.](#)

Phone: [Click here to enter text.](#)

Office Hours: [Click here to enter text.](#)

Office: [Click here to enter text.](#)

Email: [Click here to enter text.](#)

Notice: Students MUST actively participate by completing an academic assignment required by the instructor by the official census date. Students who do not actively participate in an academically-related activity may be reported as never attended and dropped from the course.

Course Description:

Survey of meteorology and related sciences. Introduces the study of the weather, including atmospheric properties and processes that control temperature, wind, precipitation, and storm systems. Students also discuss weather forecasting, air pollution, and climate change.

Pre-requisite: TSI Complete in Reading

Core Objectives:

This course fulfills four hours of the Life and Physical Science requirement in the Midland College **Core Curriculum**. The Core Curriculum is a set of courses that provide students with a foundation of knowledge, skills and educational experiences that are essential for all learning. The Core Curriculum is available in the [Midland College Catalog](#). As part of the core, this course addresses the following four objectives:

Critical Thinking Skills –Students will demonstrate critical thinking skills by exploring the how and why of the physical processes and interactions of the earth systems by course assignments, class projects and instructor created regular and final exams.

Communication Skills – Students will demonstrate communication skills by instructor mediated discussions and student presentations.

Empirical and Quantitative Skills - Students will demonstrate empirical and quantitative skills as they calculate and assess various measurements applied to weather.

Teamwork - Students will demonstrate teamwork by group assignments in lecture and gathering and analyzing data in laboratory assignments.

Text, References and Supplies:

Lecture Textbook: Ahrens, Essentials of Meteorology, 7th ed., Brooks/Cole. ISBN: 978-1-285-46236-3

Lab textbook: Meteorology Lab Manual, Keonho Kim. In Midland College bookstore.

Student Learning Outcomes

Four (4) broad goals are identified for the students of this course. These are:

1. To provide comprehensive knowledge of atmosphere and its changing behavior as it relates to human activities and influence our daily lives.
2. Important learning topics include: Mechanics of the Earth's atmosphere; environmental problems related to the atmosphere; the atmospheric phenomena of temperature, moisture conditions, atmospheric stability, forms of condensation and precipitation, air pressure and winds, role of air masses, and weather patterns.
3. Acquiring knowledge of the cloud types and explain the phenomena of rainfall, fog, snow, sleet, and frost.
4. Understand the mechanism of weather analysis and forecasting.

Student Contributions, Responsibilities and Class Policies:

Students are expected to:

1. Spend at least 1 hour per week for each classroom hour in preparation for class.
2. Make-up work is considered the ultimate responsibility of the student.

Attendance is critical in this class and MC policies may be invol

Students will be expected to comply with the policies outlined in the Midland College student handbook. Instructor policies concerning attendance and academic behavior are consistent with the policies in the student handbook (See Instructor Handout). Regular attendance is required to do well in this class.

Attendance Policy:

It is the responsibility of the students to know the policies and procedures associated with absences. These policies are set by instructors. Excused absences may include, but are not limited to, illness, severe weather, and death in the family. Instructors will determine whether or not an absence is excused. Please visit the Midland College Catalog

Withdrawal Policy:

Students who have enrolled in a Texas public institution of higher education as a first-time freshman in fall 2007 or later are permitted to drop no more than six courses during the entire undergraduate career. This limit includes all transfer work taken at a Texas institution of higher education and to second baccalaureate degrees. This statute was enacted by the State of Texas in spring 2007 (Texas Education Code 51.907). Any course that a student drops after Census Day is counted toward the six-course limit if "(1) the student was able to drop the course without receiving a grade or incurring an academic penalty; (2) the student's transcript indicates or will indicate that the student was enrolled in the course; and (3) the student is not dropping the course in order to withdraw from the institution." Please visit the [Midland College Catalog](#)

Scholastic Dishonesty:

Midland College does not tolerate scholastic dishonesty or academic misconduct in any form. Please read the MC Student Handbook on this subject. Please visit the [Midland College Catalog](#)

Evaluation of Students:

The final grade will be determined on the basis of: 75% from the lecture portion of the course and 25% from the laboratory portion. The proposed distribution of the course grade system is shown below.

- | | |
|-------------------------------------|------------|
| • Homework, Quizzes & Participation | 0% - 20% |
| • Lecture Exams | 80% - 100% |

Students will be evaluated based on the results of all coursework given throughout the semester. Your lecture instructor will inform you on the first day of class as to the tentative dates and content of the course. Students are expected to complete all assignments and exams.

There will be no make-up exams. In case of student participation in a scholastic event or other foreseen excusable absence, the instructor may grant permission to take an exam early.

Grades will be determined using the grading ranges as follows: A=90-100, B=80-89, C=70-79, D=60-69, and F=below 60. Class participation and attendance will also be considered.

Course Schedule:

This class meets for 3 lecture hours per week and 3 lab hours per week. For a tentative schedule of the class meetings and material to be covered during those meetings, please refer to the schedule distributed to each student on the first class meeting (See Instructor Handout).

Inclusion of Course Objective:

Critical Thinking Skills -Students will demonstrate critical thinking skills by exploring the how and why of the physical processes and interactions of the earth systems by course assignments, class projects and instructor created regular and final exams.

Communication Skills- Students will demonstrate communication skills by instructor mediated discussions and student presentations.

Empirical and Quantitative Skills - Students will demonstrate empirical and quantitative skills as they calculate and assess various measurements applied to weather.

Teamwork - Students will demonstrate teamwork by group assignments in lecture and gathering and analyzing data in laboratory assignments.

Non-Discrimination Statement:

Midland College does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs and activities. The following individual has been designated to handle inquiries regarding the non-discrimination policies:

Tana Baker

Title IX Coordinator/Compliance Officer

3600 N. Garfield, SSC 131

Midland, Texas 79705

(432) 685-4781

tbaker@midland.edu

For further information on notice of non-discrimination, visit the ED.gov Office of Civil Rights website, or call 1 (800) 421-3481.

Americans with Disabilities Act (ADA) Statement:

Midland College provides services for students with disabilities through Student Services. In order to receive accommodations, students must visit www.midland.edu/accommodation and complete the Application for Accommodation Services located under the Apply for Accommodations tab. Services or accommodations are not automatic, each student must apply and be approved to receive them. All documentation submitted will be reviewed and a "Notice of Accommodations" letter will be sent to instructors outlining any reasonable accommodations.

Continuity of Instruction Statement

In the event that on campus activities are suspended due to extenuating circumstances, such as weather or quarantine, the instructor will continue instruction in a manner that best supports the course content and student engagement. In this event, your instructor will notify students of the change via

[Click here to enter text.](#) At that time, they will provide details about how instruction and communication will continue, how academic integrity will be ensured, and what students may expect during the time that on campus activities are suspended. If a student becomes unable to continue class participation due to extenuating circumstances, (e.g., health and safety, loss of power, etc.) the student should contact their instructor and advisor for guidance. Resources are available to students via the SOS program. Information can be found at <https://www.midland.edu/services-resources/student-services/sos.php>.

Grievances or complaints

Concerns should be expressed as soon as possible to allow for early resolution. Midland College encourages students to discuss their concerns with their instructor first. If you feel uncomfortable discussing your situation with your instructor, students should discuss their concerns with the Chair of the appropriate department (Biology Chair – Mr. Tomas Hernandez (432-685-6751), Chemistry Chair – Mr. John Anderson (432-685-6737), Engineering and Physics Chair – Dr. Brian Flowers (432-685-4586), Geology Chair – Mr. Antony Giles (432-685-5580), Kinesiology Chair – Ms. Sheena Thompson (432-685-4579), Math Chair – Dr. Krista Cohlma (432-685-4541) then the Dean of Math and Science – Dr. Miranda Poage (432-685-4561). If a resolution is still not possible, students may proceed with the formal complaint process.

<http://catalog.midland.edu/content.php?catoid=14&navoid=2579#grievances-and-complaints>

Math & Science Division Information:

Division Office: AHSF 124 (432) 685-4561
Division E-Mail: mns@midland.edu

Department Chair: Mr. Antony Giles (432) 685-4525
Dean: Dr. Miranda Poage
Secretary: Sarah Anderson
Clerk: Liliana Orcutt

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