

METEOROLOGY SYLLABUS and DISCLOSURE

Instructor: Mr. J. H. Lindsay

Room: S 10 & S 12

Introduction: I would like to welcome your child to a new semester. We are looking forward to a challenging and interesting semester. Because you as parents are an essential part of our educational process, it will be important for us to maintain open communication. If you have questions or concerns at any time, please feel free to call me at the school.

Course Objectives: This course is designed to provide students with an understanding of the dynamic processes at play within the Earth's fluid atmosphere and an appreciation of the role of these processes in producing weather. Topics covered on the course include: the origin and evolution of the Earth's atmosphere, the structure and characteristics of the atmosphere, the Earth/Sun relationships and their influence on the seasons, solar and terrestrial radiation, the hydrologic cycle, the gas laws, global circulation, weather systems and fronts, storms and analysis of weather maps. Weekly laboratory exercises have been designed to complement the topics covered in lecture.

Skills Student Will Develop and Maintain:

Characteristics of Science

Uses safety techniques

Records investigations clearly and accurately

Writes clearly and uses proper units

Uses proper units

Uses scientific tools

Organizes data into graphs, tables, and charts

Interprets graphs, tables, and charts

Uses technology

Recognizes the importance of explaining data with precision and accuracy

Uses models

Depending on the needs of the student, I can cover some, or all of the following meteorology subjects or units.

Course Outline: This course is designed to provide students with an understanding of the dynamic processes at play within the Earth's fluid atmosphere and an appreciation of the role of these processes in producing weather. Topics covered on the course include: the origin and evolution of the Earth's atmosphere, the structure and characteristics of the atmosphere, the Earth/Sun relationships and their influence on the seasons, solar and terrestrial radiation, the hydrologic cycle, the gas laws, global circulation, weather systems and fronts, storms and analysis of weather maps. Weekly laboratory exercises have been designed to complement the topics covered in lecture.

Week 1: Introduces our theme and sketches out our approach to understanding the weather by introducing concepts of temperature, pressure, and density.

Week 2 and 3: We look at the atmosphere, the ozone layer, and the greenhouse effect.

Week 4 and 5: We explore how heat moves around and see how the Santa Ana winds develop.

Week 6 and 7: We turn to the topic of atmospheric moisture and find out how air is brought to saturation.

Week 8: We introduce the air parcel as a useful concept for talking about clouds and learn how thunderstorms form and why they don't form as often as they could.

Week 9: Devoted to 4 principal forces that determine when, where, and how quickly the winds blow.

Week 10: We look at the 1-cell model and the 3-cell model of global atmospheric circulation.

Week 11: We see fronts in action and learn about the life cycle of extra-tropical cyclones that develop along them.

Week 12: We'll see what's happening higher in the atmosphere that also affects cyclones. We'll further explore vertical and horizontal wind shear.

Week 13: Devoted to the technological advancements in Meteorology. RADAR and Satellites.

Week 14: We continue to learn about radar and follow images of squall lines, thunderstorms, and tornadoes.

Week 15: Covers the influence of mountains on the atmosphere and the big snow storms of the United States.

Week 16: Discusses the influence of the ocean on weather and climate and outlines the development and effects of El Nino. We'll continue with "wild weather" which explores tropical cyclones.

Week 17: Finally we close the course with a look at climate records and patterns to help with forecasting and modeling.

Course Requirements: (\$10 Science class fee)

1. Participate in class discussions and be prepared for class, (with paper, pencil, book & calculator).
2. Do homework problems, in-class activities and projects.
3. Take quizzes.
4. An organized 3-ring binder for notes and old assignments.
5. Safely participate in lab-activities and projects that require report-writing and construction skills.

Academic-Grading Procedures:

The grades will be determined by the student's performance in 4 areas.

- i) Test and Quizzes ---40%
- ii) Homework ---30%
- iii) In-class Activities, notes and worksheets ---20%
- iv) Project Reports ---10%

Grades will be determined using the following scale:

Percentage	Grade	Percentage	Grade	Percentage	Grade
93-100-----	A	72-77-----	B-	40-46-----	D+
89-92-----	A-	64-71-----	C+	34-39-----	D
84-88-----	B+	55-63-----	C	29-33-----	D-
78-83-----	B	47-54-----	C-		

Students with no trancies or tardies during a given quarter may have their lowest quiz score dropped when grades are calculated.

Policies and Procedures: This class will strictly adhere to the policies and procedures mandated by the Davis County School District Administration and School Board. This Policy can be found in the student folder. Tardy and Attendance policies will also be in accordance with the School-Board Rulings. Any student tardy 4-times to class in a term and/or absent without an excuse 3-times, will receive a "U" citizenship grade. Note that school excused absences are not counted. After each absence, upon returning to school, it is the student's responsibility to verify the absence with me or the absentee office by means of a note or a phone call at 402-4800 from a parent or guardian stating the reason. Absences not verified within 2-days of the day of return will be marked as a truancy. School-excused absences need to be reported to the teacher prior to leaving. I strongly encourage guardians to keep close tabs and records on their student's absences by using the Internet. If unexcused absences persist, I will be contacting the parent directly. A student is considered absent if he/she misses more than 20 minutes of one class time, or leaves without permission. If beyond 20 minutes or he/she doesn't return, they will be considered truant. Remember, a student who is in trouble with the citizenship grade, may still pass academically and make up the Citizenship Grade later. I strongly recommend that the student to continue with the academic endeavors. However, no extra-credit on the academic grade will be awarded to a student with a "U" citizenship grade.

Makeup and Late Work: Makeup work is due five school days after the excused absences. It is the student's responsibility to get the missed work from the teacher. Truancies cannot be made up. Quizzes, tests and labs may be made up after school, as arranged with the teacher by the student. Work that is late will **receive no credit!** Late work is defined as being handed-in during and after the day it is graded and handed back to the rest of the class. Deadlines will only be posted in the classroom and not on line.

Citizenship Grade and Classroom Rules: The Citizenship Grade Policies will be objectively followed according to guidelines found in the student folder.

To enhance the learning atmosphere, the teacher has established 5 rules that all students are expected to follow: (The citizenship grade & extra-credit grade will be partly based off of the following)

- i) No horseplay of any kind is allowed, (always be nice to other students).
- ii) Listen when someone is commenting or lecturing, especially the teacher.
- iii) Raise your hand for questions and comments.
- iv) Work quietly at your workstation & keep the noise level down during group-study time.
- v) Cooperate with your teacher and sleeping is not allowed, (Keep your heads off the desks).
- vi) No electronic communication-devices are allowed during class-time. (Except for emergencies!)

3. Extra-points will be awarded to each student per term for good behavior & attitude. It will be up to the student to keep these awarded points by adhering to the classroom rules. If the bonus-point are sacrificed by the student and the rule breaking persists, after-school detention and counseling is then administered and the Citizenship-grade will be affected. After-school detention will consist of janitorial activities and the time involved will be determined by the number of rules broken, (45min / broken rule). If the rule-breaking persists beyond 3 hrs of after school detention, then the teacher will contact the parents to discuss the option of removing the student from the class. At the end of the quarter, the student's bonus-points will be added on to the academic grade as extra-credit, (This may affect the grade to about 10%). Additional extra-credit will be awarded to students for participating in science-related extra-curricular activities. The school's science offer many of these activities. **No extra credit will be awarded to a student that qualifies for a "U" or is absent for more than 25% for any reason for the class at the end of the quarter.**

Special Note to the Parents: If there are any special problems, I would like permission to keep your child after school. Many students require tutoring in physics. If transportation outside normal school hours is a problem, you and your child need to discuss how that can be handled. Please indicate your approval by signing your names. If you have any comments or concerns, feel free to e-mail me at Jlindsay@dsdmail.net I highly encourage you to keep abreast of your student's grade & progress by using the Internet. I am pleased with the opportunity of working with your child, and I am looking forward to an enjoyable and productive year.

Guardian Signature:

