DeAnza College Physical Sciences, Mathematics & Engineering Division Winter Quarter 2017

Meteorology 10: "Weather & Climate Processes"

Class times & Location: Section 02 CRN: 34892 1:00-3:15

p.m. Mon/Wed

Instructor: Paul J Olejniczak (Oles)

Office: S48A

Email: olejniczakpaul@deanza.edu

Office Hours: 10:30-11:00 a.m. MW & 12:30-1:00 p.m. TTh

Textbook: "Essentials of Meteorology" Most Recent Edition by C.

Donald Ahrens.

Brooks/Cole Cengage Learning

Class Website: olespaul.com

Course Description:

Meteorology 10 is a survey course, which provides students with an overview of the principals of the science of meteorology and climatology. Major themes include the origin, evolution and structure of Earth's atmosphere; a study of the major atmospheric variables that determine weather and an examination of the objectives techniques used by meteorologists to forecast the weather. The course will also present an overview of climate science including the systems used to classify climate.

Lecture sessions will incorporate appropriate audiovisual materials and live Internet access to major meteorological databases to explore significant national weather events that occur during the quarter.

Evaluation:

A student's final grade will be based upon four (4), fifty (50) questions each, objective-type exams including a comprehensive final examination. The lowest of the first three test scores will be dropped and the final grade will be a simple average of the remaining two (2) exams and the final exam. Sample exams from previous quarters are posted online.

The best way to prepare for an examination is to review the Chapter Study Questions and the practice tests that are provided on the course web site.

Make-up examinations will not be administered.

- A missed test <u>for any reason</u> will be counted as the student's one allowed dropped test. <u>There will be no exceptions</u>.
- Students missing two tests must withdraw <u>before the final withdrawal date</u> or receive an "F" grade for the class.
- Last day to drop a class with no record of grade is Sun 01/22
- Last day to drop with a "W" is Fri 03/03

Extra Credit:

- Extra credit questions will be provided on each examination and will be drawn from material in instructional videos presented during class.
- Extra credit assignments and projects will be also be offered during the quarter.
- All extra credit is optional.

Notes regarding examinations:

- Scantron forms and #2 pencils are required for all examinations. It is the responsibility of the student to mark answers clearly and to fully erase mis-marked answers. Scantron forms will not be rescored.
- Graded Scantron forms should be retained by students as proof they have taken a test.

Letter Grades:

A	= 89% +
В	= 79% to 88%
C	= 69% to 78%
D	= 59% to 68%
F	= 0% to $58%$

Important Dates:

Jan 09	Mon	Classes begins
Feb 06	Mon	Test 1 on Chapter 1, 2, 3 & 4
Feb 20	Mon	Holiday - No Class
Feb 27	Mon	Test 2 on Chapters 4, 5, 6 & 7
Mar 20	Mon	Test 3 on Chapters 8, 9, 10 & 11
Mar 27	Mon	Final Exam 1:45 p.m.

<u>Class Schedule</u>: (Date indicates: "The Week of Monday")

Jan 09/11 Mon/Wed Orientation

Chapter 1: "The Earth's Atmosphere"

Special Audiovisuals, Demonstrations or Class

Assignments:

Coast Tele-Course Video Series: "The Origin of the

Solar System"

Jan 16 Mon Holiday – No Class

Jan 18 Wed Chapter 2: "Warming the Earth and the Atmosphere"

Jan 23/25 Mon/Wed Chapter 3: "Air Temperature"

Special Audiovisuals, Demonstrations or Class

Assignments:

NOVA Video: "What's Up with the Weather?" (The

Issue of Global Warming)

Jan 30/01 Mon/Wed Chapter 4: "Humidity Condensation & Clouds"

Special Audiovisuals, Demonstrations or Class

Assignments:

Earth Science Video Library: "The Hydrologic Cycle -

Water in Motion"

Earth Science Video Library: "Reading the Clouds"

Review for Test 1

Feb 06/08 Mon/Wed Test 1 on Chapters 1, 2, 3 & 4

Return and Review Test 1

Chapter 5: "Cloud Development and

Precipitation"

Special Audiovisuals, Demonstrations or Class

Assignments:

NOVA Video: "Flood"

Feb 13/15 Mon/Wed Chapter 6: "Air Pressure and Winds"

Special Audiovisuals, Demonstrations or Class

Assignments:

Instructional Video: "Pressure & Winds"

Feb 20 Mon Holiday – No Class

Feb 22 Wed Chapter 7: "Atmospheric Circulation"

Special Audiovisuals, Demonstrations or Class

Assignments:

NOVA Video: "Chasing El Nino"

Feb 27/01 Mon/Wed

Chapter 8: "Air Masses, Fronts & Extratropical

Cyclones"

Review for Test 2

Test 2 on Chapters 5, 6, 7 & 8

Return & Review Test 2

Chapter 9: "Weather Forecasting"

Special Audiovisuals, Demonstrations or Class

Assignments:

NOVA Video: "Lightning"

Mar 06/08 Mon/Wed Chapter 10: "Thunderstorms and Tornadoes"

Special Audiovisuals, Demonstrations or Class

Assignments:

Video: NOVA: "Deadliest Tornadoes" Chapter 11: "Hurricanes and Typhoons"

Special Audiovisuals, Demonstrations or Class

Assignments:

NOVA Video: "Katrina: Anatomy of a Disaster

Mar 13/15 Mon/Wed Chapter 12: "Global Climate"

NOVA Video: "The Climate Puzzle"

Review for Test 3

Mar 20/22 Mon/Wed Test 3 on Chapters 9, 10, 11 & 12

Return and Review Test 3

Chapter 13: "The Earth's Changing Climate"

Mar 27 Mon Final Exam 1:45 p.m.

Rules & Regulations:

Regular class attendance is required. Class attendance will be recorded each class period. Students missing three (3) consecutive classes without will be dropped from the class.

The use of cell phones or pagers is strictly forbidden during class unless prior arrangements have been made with the instructor.