

SYLLABUS, MASTER SCHELE AND COURSE ASSESSMENT – Fall Quarter 2012
PHEV145 (A) – Weather I – Climate and Global Change – CRN #11062

Classroom Lecture/Discussions - M-W-F @ 11:00 AM – Place: PISB 108 -- Fall'Qtr'12.
 Lab Learning Investigations - Thursday @ 09:00 AM or 10:30 AM – Place: Disque 702

PROFESSOR: Dr. Fred House => Course Mail: Always Use **DU LEARN** Mailing System.
 OFFICE: 812 Disque => 215.895.2725.
 OFFICE HOURS: M-W @ 1:00 PM to 2:00 PM and by appointment.

TEXTS: WEATHER STUDIES (Fifth Edition) by Joseph M. Moran
INVESTIGATIONS MANUAL (2012-2013) - American Meteorological Society

<u>WK</u>	<u>DATE</u>	<u>Q's & INV/CWS(#A/#B)'s. e dates</u>	<u>CONTENT</u>
1 st	Sep 24		Introction to Course – DU LEARN - Quizzes - Syllabus – Communication.
	26		Student Research Paper on Climate Change – Discussion of Topic & Proceres.
	27		INV/CWS(1A) – Air Pressure & Wind. Course Homepage & Weather Information
	28		Ch 1: Monitoring Weather – Ch01.a_History of Meteorology – VIDEO “Weather.”
	30	➔	Insert INV/CWS(1A) answers before DU LEARN midnight deadline Sunday.
2 nd	Oct 1		Ch01.b_Earth Climate System,
	3		Ch01.c_Watching the Weather.
	4		INV/CWS(1B/2A) – Air Pressure Patterns & Surface Weather Maps.
	5		Ch 2: Atmosphere: Origin, Composition and Structure - Ch02.a_Orgin_Composition.
	7	➔	Insert answers INV/CWS(1B/2A) before DU LEARN _Midnight deadline Sunday..
3 rd	Oct 8	➔	Oct 8, Monday – Columbus Day - University Holiday (No Classes).
	10		Ch02.b_Surface and Upper-air Observations.
	11		INV/CWS(2B) – The Atmosphere in the Vertical.
	12		Discuss Proceres and Observational Data for Climate Change Research Paper.
	14	➔	Insert answers Q1 & INV/CWS(2B) before DU LEARN _Midnight deadline Sunday..
4 th	Oct 15		No class scheled today – Dr. House on travel to Boulder, CO.
	17		No class scheled today – Dr. House on travel to Boulder, CO.
	18		INV/CWS(3A/3B) – Weather Satellite imagery & Sunlight Throughout the Year.
	19		No class scheled today – Dr. House on travel to Boulder, CO.
	21	➔	Insert answers Q2 & INV/CWS(3A/3B) before DU LEARN _Midnight deadline Sunday..
5 th	Oct 22		Ch 3: Solar and Terrestrial Radiation - Ch03.a_Earth-sun relationships.
	24		Ch03.b_Heating and Cooling the Earth, VIDEO “Solar Radiation I.”
	25		INV/CWS(4A) Temperature and Air Mass Advection.
	26		Ch03.c_Earth Radiation Budget - NASA VIDEO.
	28	➔	Insert answers Q3 & INV/CWS(4A) before DU LEARN _Midnight deadline Sunday.
6 th	Oct 29	➔	Submit Graphs of Annual TEMP & Total PRCP for Paper, Hard Copy, Today.
	29		Ch 4: Heat, Temperature and Atmospheric Circulation – Ch04.a_Temp. Variability.
	31		Ch04.b_Temperature Controls and Energy Flows.
Nov 1			INV/CWS(4B) – Heating Degree Days and Wind Chill.
	2		Ch04.c_Urban Heat Island – VIDEO “Global Warming.”
	4	➔	Insert answers Q4 & INV/CWS(4B) before DU LEARN _Midnight deadline Sunday.

SYLLABUS, MASTER SCHELE AND COURSE ASSESSMENT (CONTINUED)

- 7th Nov 5 **Ch 5: Air Pressure** – Ch05.a_Horizontal and Vertical Pressure Variations.
7 Ch05.b_The Ideal Gas Law.
8 **INV/CWS(5A/5B)** – Air Pressure Change and Atmospheric Pressure in the Vertical
9 Flexible day – weather topic discussion.
11 ➔ Insert answers **Q5 & INV/CWS(5A/5B)** before **DU LEARN** _Midnight deadline Sunday.
- 8th Nov 12 **Ch 6: Humidity, Saturation and Stability** Ch06.a_Hydrological Cycle & Water Vapor.
14 Ch06.b_Air Saturation and Relative Humidity.
15 **INV/CWS(6A/6B)** – Clouds, Temperature and Air Pressure; Rising and Sinking Air.
16 Ch06.c_Stability and Vertical Motion – VIDEO “Convective Clouds.”
18 ➔ Insert answers **Q6 & INV/CWS(6A/6B)** before **DU LEARN** _Midnight deadline Sunday..
- 9th Nov 19-25 ➔ **Drexel Holiday – Thanksgiving – No classes scheled this week.**
- 10th Nov 26 ➔ **Submit your Research Paper on Climate Change, Monday, ring Class.**
26 **Ch 7: Clouds, Precipitation and Weather Radar** Ch07_Formation & Classification.
28 Ch07.b_Formation and Types of Precipitation;
29 **INV/CWS(7A/7B)** – Precipitation Patterns and Doppler Radar.
30 Ch07.c_Forecasting Precipitation – VIDEO “Formation of Precipitation.”
Dec 2 ➔ Insert answers **Q7 & INV/CWS(7A/7B)** before **DU LEARN** _Midnight deadline Sunday..
- 11th Dec 3 Return and Review Research Papers - weather topic discussion.
5 Course wrap-up, evaluation and review for final exam.
6 **No Class Scheled Thursday** – Lab Investigations Completed Last Week.
7 **No Class Scheled Friday** – **Complete your Online Final Exam.**

Dec 5 - Dec 9 ➔ Wed. thru Sunday, Online Comprehensive Final Exam for Entire Course.

All Course Work Must Be Submitted by Monday Midnight Deadline, Dec 10 – No Exceptions!

PHEV145 COURSE ASSESSMENT

Course Grading Structure:

Seven Online Chapter Quizzes plus Comprehensive Final Exam.	➔	375 points.
Fourteen Student DU Learning Investigations in Laboratory Section.	➔	308 points.
Research Paper on Global Warming		
Mid-Term Draft Submission	➔	50 points.
Completed Paper Submission	➔	350 points.
Lecture Period Attendance Check	➔	100 points
Extra Laboratory Points	➔	<u>25 points</u>
Maximum class score totals	➔	1,208 points.

Course Letter Grade is based on a Frequency Distribution of Student Scores at End of Term!