

2015

Earth Science 101 Introduction to Weather Fall 2015

Bob Cataneo

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INTRODUCTION TO WEATHER (ESC 101) – Fall, 2015

Mission of Parkland College: to engage the community in learning

ESC 101 – 3 hours of class, 2 hours of lab, 4 hours credit

IAI P1 905L – Physical Science

Basic meteorology with emphasis on topics related to everyday experiences with weather, while stressing the understanding and application of meteorological principles.

General Education Objectives: Students will:

- demonstrate the ability to read, write, listen, and speak effectively;
- demonstrate the ability to think critically, which includes collecting facts and making decisions based upon them, and solving problems using methods of critical and scientific inquiry;
- demonstrate the ability to compute, think, and express themselves effectively in scientific terms;
- demonstrate the ability to use technology, especially computer technology, to access, retrieve, process, and communicate information.

Course Goal: To improve each student's ability to recognize with understanding, the science in the world around them.

Instructor Information:

Bob Cataneo Phone: 351-9800

Office Hours: 9:00 – 10:00 a.m. M, W, F in L240

e-mail: bcataneo@parkland.edu

Instructor Philosophy: To provide for the students, an efficient and effective mechanism for maximum understanding of course material.

Core Values

I believe strongly in the Core Values espoused by Parkland College: Honesty and Integrity, Fairness and Just Treatment, Responsibility, Multiculturalism, Education, and Public Trust. Essentially, these values set guidelines for how I should treat you and how you should treat each other (and me). Failure to be respectful of one another or to maintain ethical behavior will not be tolerated.

Mass Notification System

In the event of a significant campus emergency, Parkland College will activate its mass notification system. We encourage you to sign up for this free service and select how you would like to be notified: text message, audio message, or email message. Sign up at: <http://www2.parkland.edu/publicsafety/alerts.htm>

Classroom Behavior

In order to maximize the course goal and learning of course material, it is essential that there be a positive classroom atmosphere. Any behavior that interferes with the learning process will not be tolerated; so, please maintain civility, and refrain from distractions and disruptive behavior. Consistent with this, be sure that all electronic devices are turned off before entering the room, **and remain off during class time. Unless a specific exception has been allowed, there are to be no electronics (cell phones, PDAs, laptops, earbud phones, or music storage devices) in use during lecture or lab. Points will be deducted from your grade for ignoring the above policy.**

Required Materials:

- 1) Text: Essentials of Meteorology –Ahrens (7th edition)
- 2) Lab Packet

Lecture/Lab

For section 001, lecture will be in L216
M,W,F from 8:00 – 8:50 AM; lab will be
in L216 on Thursday from 8:00-9:50AM

For section 002, lecture will be in L216
M,W,F from 10:00 – 10:50 AM; lab will be
in L216 on Thursday from 10:00-11:50AM

Exams are 70% of your grade (4, 1 hour exams: 50%; Final: 20%)

Labs are 20% of your grade

Attendance/Class Participation is 10% of your grade

- A 90-100%
- B 80-89%
- C 70-79%
- D 60-69%
- F Below 60%

Attendance/Withdrawal:

Around the tenth day of a full semester class, I am required to assess your attendance. If you have not attended to that point, you will be dropped with no refund of tuition or fees. After the census date, do not plan on an instructor withdrawal if you want to withdraw from the course. You are responsible for your own withdrawal by the withdrawal date. Non-attendance after the census date will result in an “F” if you do not withdraw. Withdrawal on or before Dec 4, 2015 by 5 PM will result in a grade of “W”. Non-attendance after the withdrawal date will result in an “F” if you do not withdraw.

Assistance:

If you need help and want to discuss course material or problems that may affect your performance in the course, please contact the course instructor, and/or The Center for Academic Success(CAS).

Contacts at CAS: Anita Taylor: Room D 120, Phone: 353-2005

Sue Schreiber: Room D 120, Phone: 351-2441

CAS email: CenterForAcademicSuccess@parkland.edu

Disabilities:

If you feel you have a disability for which you may need an academic accommodation (an alternate testing environment, use of assistive technology or other classroom assistance), please contact:

Cathy Robertson:

Room X-148 353-2082 crobinson@parkland.edu

For additional syllabus information, please go to:

https://cobra.parkland.edu/shared/shared%20content%20files/syllabus_addendum.html

Course Outline:

Chapter 1 The Earth's Atmosphere
Chapter 8 Air Masses, Fronts, and Middle-Latitude Cyclones
Exam 1 (Grade - %)

Chapter 2 Warming the Earth and the Atmosphere
Chapter 3 Air Temperature
Exam 2 (Grade - %)

Chapter 4 Humidity, Condensation, and Clouds
Exam 3 (Grade - %)

Chapter 5 Cloud Development and Precipitation
Chapter 10 Thunderstorms and Tornadoes
Chapter 11 Hurricanes
Exam 4 (Grade - %)

Chapter 6 Air Pressure and Winds
Chapter 7 Atmospheric Circulations

- Exams will be announced one week prior to exam date.
- The final exam(**Exam 5**) will be comprehensive, and will be given during finals week (Dec 14-18).

Final exam for section **001**: Monday, Dec 14 (0800-1000)
002: Thursday, Dec 17(0800-1000)

Lab Schedule

Aug 27	Thunderstorm/Lightning Videos
Sep 3	Geography Lab Part One (Lab 1)
Sep 10	Hurricane Video
Sep 17	Fronts and Air Masses (Lab 3)
Sep 24	Planetarium - Seasons
Oct 1	Earth-Sun Relationships – Seasons (Lab 4)
Oct 8	Temperature Scales and Isoplething (Lab 5)
Oct 15	Weather Instruments Lab – Water Survey
Oct 22	Humidity – Part 1 (Lab 6)
Oct 29	Humidity – Part 2 (Lab 7)
Nov 5	Blizzard Video
Nov 12	Vertical Changes in Temp. and Press. (Lab 8)
Nov 19	Adiabatic Processes and Stability (Lab 9)
Dec 3	Winds and Air Pressure (Lab 10)
Dec 10	Ice Storm Video

Late Exams and Late Labs: If you miss an exam, see the instructor about a possible make up exam. Labs are due on lab day. Labs may be turned in **no later than Friday** with no penalty.
Labs cannot be made up after graded labs have been returned

