

2015

Earth Science 102 Introduction to Physical Geology Fall 2015

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Syllabus - Introduction to Weather (Online) – Fall 2015
The mission of Parkland College is to engage the community in learning

Instructors: Julie Angel & Bob Cataneo
Note: Bob will grade quizzes/exams; Julie will handle the remainder of the course.

Office Hours (Online): Mondays 3:00-4:00pm Central Time (or by appointment)

Office Hours (L-212): Mondays and Fridays 10:00-11:00am & Wednesdays 1:00-2:00pm
 (or by appointment)

Email: Via Cobra email within the course. Julie's Cobra e-mail is jangel@cobra.parkland.edu.
 Bob's Cobra e-mail is bcataneo@cobra.parkland.edu. If Cobra is experiencing difficulty,
 please use jangel@parkland.edu or bcataneo@parkland.edu

Office Telephone: 217-373-3743 (Julie)

Department Office: Natural Sciences Department, Room L120, (217) 351-2285

Required Text: Essentials of Meteorology, Seventh Edition, C. Donald Ahrens

Recommended Materials: Basic Scientific Calculator.

Course Description:

Basic meteorology with emphasis on topics directly related to everyday experiences with weather, while stressing the understanding and application of meteorological principles. (IAI P1 905L – Physical Science)

Tentative Course Outline

Topics

Reading Assignments

		<u>Seventh Edition</u>
Week 1 - Weather and Climate, Weather Map	Chapter 1	Pages 15-25
Week 2 - Air Masses and Fronts	Chapter 8	Pages 223-241
- The Earth's Atmosphere	Chapter 1	Pages 3-15
Week 3 - Energy and Heat Transfer, Warming the Earth and the Atmosphere	Chapter 2	Pages 29-46
Week 4 - Seasons and Earth-Sun Relationships	Chapter 2	Pages 46-55
Week 5 - Air Temperature, Seasonal and Daily Variations	Chapter 3	Pages 59-81
Week 6 - Humidity and Relative Humidity	Chapter 4	Pages 85-98
Week 7 - Condensation and Clouds & Midterm Exam- October 14, 15 & 16, 2015	Chapter 4	Pages 98-118
Week 8 - Cloud Development and Stability	Chapter 5	Pages 112-134
Week 9 - Precipitation Processes and Precipitation Types	Chapter 5	Pages 134-152
Week 10 - Air Pressure & Winds	Chapter 6	Pages 156-182
Week 11 - Atmospheric Circulations	Chapter 7	Pages 184-219
Week 12- Middle-Latitude Cyclones	Chapter 8	Pages 222-254
Week 13 - Thunderstorms	Chapter 10	Pages 287-311
Week 14 - Tornadoes	Chapter 10	Pages 311-328
Week 15 - Hurricanes	Chapter 11	Pages 333-363
Week 16 - Final Exam Review Final Exam – December 13, 14, 15 & 16, 2015		

Grading:

Weekly Quizzes	25%
Midterm Exam	20%
Final Exam	20%
Labs	25%
Weekly Participation	10%
 Total	<hr/> 100%

Grading scale:

A	90% - 100%
B	80% - 89%
C	70% - 79%
D	60% - 69%
F	0% - 59%

You may access your grades at any time by going to our course site and clicking on "Grades". We keep your grades current by recording them in the Cobra gradebook in a timely manner.

Course Meeting Times:

This is a 4-credit laboratory science course (IAI P1 905L – Physical Science).

As this course is online, there are no formal meeting times. Each week's lecture material and a lab will be provided through Cobra and you "attend" lectures and the lab at the hours most convenient for you. There are weekly deadlines provided in the syllabus and within the weekly overview files. **Students are responsible for keeping pace with the course.** Staying up-to-date includes watching closely for course announcements, changes in test dates, lab exercises and due dates, changes in the syllabus, and any other changes deemed necessary by the instructor.

For on-campus full-semester sections of this course there are about 3 hours of lecture per week and 2 hours of lab per week. Please keep this in mind and schedule a similar amount of time (5 hours per week) for "attending" your online lectures and labs. This time does not include reading the textbook or studying, which come outside of class and lab time. Without the structure of scheduled class and lab meeting times, you as an online student have the responsibility of scheduling enough time to successfully complete the course material each week.

Student Office Hours (Julie):

Online office hours are through a live chat feature called AdobeConnect®. Student office hours will be held on Monday afternoons between 3:00 PM and 4:00 PM Central Time. Online student office hours can also be conducted by appointment by sending Julie an email in our Cobra course space. Please give me as much notice as possible for scheduling an appointment.

Online office hours can be accessed through the "Student Office Hours" news item on our course homepage in Cobra, or by clicking on the chat room link within the "CHAT Office Hours" module near the top of our class content page in Cobra. Please sign in as a guest by entering a user name (make sure it's something I will recognize as you – like your name). I will then accept you into the room and we can chat. You may be prompted to download Adobe Flash Player. If so, you'll need to do that before you can enter the chat room.

If you are on campus, you are welcome to come by during on-campus office hours during the times and at the location listed on page 1 of the syllabus.

On a few occasions, I may have to move a scheduled office hour. In those instances, I will send an email message to the class via Cobra e-mail.

Lectures (Julie):

New lecture material will be posted on Cobra once a week on Saturdays. You will have approximately nine days to complete each week's assignments. Lecture material will come in a variety of forms – text and graphics in PDF files, PowerPoint presentations, and perhaps some audio and video clips. It is important that you utilize all of the material presented in Cobra each week in addition to the assigned reading in the textbook. Some of the lecture material is not presented in the textbook.

Lecture Expectations:

- To be successful in this course, you should access all of the online material presented on Cobra each week. Part of your participation score in the class will be based on your use of the course materials provided on a weekly basis.
- You should complete reading assignments in the textbook prior to accessing the online lecture material. Lecture material will be presented with the assumption that you have completed the assigned reading. Lecture material will not be a complete repeat of the textbook material, but rather an enhancement of the material you should already be learning from the book. Quizzes and the final exam will cover material presented online and in the textbook.
- You are encouraged to initiate and/or participate in discussions with other classmates through the Discussion Forum option in Cobra. I will check active Discussion Forums and provide feedback, including in the *Help Discussion Forum*. You will receive credit for weekly participation by participating in the discussion forums.
- No formal homework assignments will be collected. However, you will be given reading assignments. You will need to know the *Key Terms* and be able to answer the *Questions for Review* provided at the end of each chapter in your textbook. Feel free to ask questions during live chat office hours, via email, or on the Help Discussion Board.

Labs (Julie):

Along with the lecture material provided each week, you will be provided with a lab to complete. Typically, the new labs for the week will be posted on Saturday. You will be required to complete all 14 labs during the semester, as no lab scores will be dropped.

Three missing labs will result in an automatic failure of the lab portion of the course. This is a lab-based general education course, therefore, you must pass the lab portion of the course to pass the entire course

Lab materials will be provided online and all will be completed and submitted online.

In each week's folder, I provide a file containing an exact copy of the online lab that can be printed. Some students like to print these labs and work with paper and pencil to complete the questions. If you complete your lab using paper and pencil, remember to enter and submit your answers within your online lab. **Please do not purchase lab packets from the Parkland Bookstore, as the on-campus labs have different numbers and directions.**

Typically, you will have full nine days to complete each lab. The submission deadline each week is at 11:59PM on Monday. Please see the lab due date document for two exceptions.

LATE LAB POLICY: One late lab will be accepted with a minor penalty (10%), provided that it is submitted no later than the Wednesday following the due date at 11:59PM Central Time. All future late labs will receive a 25% deduction if submitted no later than the Wednesday following the due date at 11:59PM Central Time. Labs not submitted by 11:59PM on Wednesday (or Thursday for the two exception dates) will receive a score of zero unless prior approval of an extension has been granted. Please pay close attention to deadlines!

One lab is assigned each week. Each lab is designed to stand alone and does not necessarily reflect the lessons presented in the same week. This is especially true during the first two weeks of the semester when you will be gaining important knowledge of earth's geography. It's very difficult to talk about weather without a good working knowledge of geographic locations! Some labs are designed to explore topics that require more detailed analysis than can be expected in a short quiz or exam. Some labs will explore topics for which significant time cannot be given in the lecture portion of the course. And a few labs will cover similar content provided in lectures, but delayed a week or two from the lectures so that you have a better grounding in the topic before performing the lab.

Lab Expectations:

- Budget enough time for each lab. The on-campus lab meetings are scheduled for a full two hours. Many labs may take less than two hours to complete, but a few will probably take longer as you will likely be working alone and not have an instructor or other students nearby to ask questions and receive feedback. Unfortunately, I cannot be available 24/7 to answer questions, so it might take 24 hours to receive an answer. For that reason, please start your labs early in the week so that there is time for you to ask questions and receive feedback.
- If you run into a confusing section, please be patient. Try reading carefully through all of the provided instructions again. If that does not help, please post your question in the Help Discussion Forum and be sure to include the lab number in the subject line of your post. You can also email questions to Julie in Cobra. I realize that when you are working on a lab and reach some difficulty you will want instant feedback and I wish I could always be there to give it. Please be patient and we'll work through any problems that arise. Sometimes technical glitches arise and cause frustration for everyone in the class. I intend to work hard to make the class as enjoyable and rewarding as possible and we'll work together through the rough spots. I will be flexible as long as you are putting forth your best effort.
- For labs, you can work with other students; however, you are expected to answer questions in your own words and not copy answers from others. Copying the work of others is considered plagiarism (See section on "Academic Honesty")
- Although you are allowed to work with others, you should work through problems on your own, then compare your results with your study group. This will ensure that you understand the material. Lab is a learning process. The concepts presented in labs often show up on quizzes and exams.

Quizzes and Exams (Bob):

After each week's lesson, there will be a 20-question quiz that you must take online on the following Sunday, Monday or Tuesday (please see the quiz and exam due dates for two exceptions). You will have between 20 and 25 minutes to complete the 20-question quiz depending upon the complexity of the week's material. The quiz introduction will list the amount of time allotted for completion before you start the quiz. Fifteen quizzes will be given and I will count the highest 12 scores and drop the lowest 3 scores. Since three quiz scores are dropped, no make-up quizzes will be given.

The following required exams will also be given:

<u>Midterm Exam</u>	Covers all material from Week 1 through Week 7	Available October 14, 15, 16
<u>Final Exam</u>	Covers all material from Week 8 through Week 16	Available December 13, 14, 15, 16

All quizzes and exams are timed, so it is important that you take the weekly quizzes and exams on a reliable Internet connection. Wireless connections are more prone to interruptions than wired connections, so you should consider taking quizzes and exams on a hard-wired Internet connection. Once the clock starts for a quiz or exam it cannot be paused or restarted.

Cobra has been shown to do well with most internet browsers.

Pace of Course and Time Commitment:

College courses generally move at a much faster pace than you may have experienced in high school. It is **VERY IMPORTANT** to keep up with your readings, lab assignments, etc. and to take time to review your notes as we move along. Online courses require a bit more self-discipline than on-campus courses, so you may want to set up a schedule that you follow each week just for our online course. A college course will also require more study time outside of class than you may be used to. The general rule states that for each hour in our class, you will need to spend a *minimum* of 2 hours of studying outside of class each week. This means that this course may require *at least* 8 hours of studying outside of class each week.

Attendance:

Parkland College requires that we keep attendance records for this course. You are responsible for information provided in this course even if you are absent for an amount of time that may include: changes in test dates, lab exercises and due dates, changes in the syllabus and course information, and additional material not found in your text. Our mutual goal is **your success** in this course. *Inadequate attendance has always been a leading cause of failure in college courses.* The attendance policy in this course is in keeping with the policy stated in the Parkland College Catalog. It says “Regular and prompt attendance is expected at all classes,” except in cases involving illness or emergency which should be brought to the attention of the instructor. “Regular attendance and consistent study habits are considered necessary for academic success in college. ***Faculty members have the prerogative of lowering grades for excessive absence.***”

Online class attendance is determined by student participation in online learning activities and/or contact with the instructor. **For our online weather course, you must complete all "Week 1" activities except the lab and quiz before the second Monday of the semester (August 31, 2015) to fulfill this attendance/participation requirement.**

Drops/Withdrawals

Please read the section “Dropping or Withdrawing from a Class Section” in the Syllabus Addendum found in our Cobra course space. If you find it necessary to withdraw from this course, withdrawal on or before December 4, 2015 by 5pm will result in a grade of “W” (withdraw, no penalty). Non-attendance after the census date will result in an F if you don’t withdraw yourself. **Always consult with your counselor or financial aid advisor before dropping any course.**

Cobra Course Email:

Please check your email in Cobra on a regular basis. It is best to check it once a day, or at a minimum, once every other day. **All messages to the class will be sent through Cobra.**

Student Email Account:

You should access your Parkland email account at <http://stu.parkland.edu> a minimum of several times each week (preferably daily) to obtain information about courses or college announcements. Please check your email daily within our ESC101 course in the Cobra system for potential course updates.

If you need assistance accessing your student e-mail, please contact the Tech Services Help Desk as listed in the syllabus addendum

Disabilities

If you believe you have a disability for which you may need an academic accommodation (e.g. an alternate testing environment, use of assistive technology or other classroom assistance), please contact: Cathy Robinson, Room U260, 217-353-2082, crobinson@parkland.edu. Students with disabilities are asked to contact their instructors to discuss and implement their accommodations.

Veterans

We welcome student veterans of military service to join Student Veterans at Parkland (SVAP). For further information about veterans' issues, please contact:

Kristina Taylor, Financial Aid Advisor/Veterans Certifying Official
(217) 351-2228, ktaylor@parkland.edu

No Classes: **Labor Day** – Monday, September 7, 2015 (college closed)
 Thanksgiving recess – Thursday, November 26 – Sunday, November 29, 2015

Other Important**Dates:**

Last day to withdraw with “W” grade from full-semester courses – Friday, December 4, 2015 by 5pm
Last day of fall semester classes – Friday, December 11, 2015
Final Examinations – December 14-18, 2015
****Final for ESC101-051W: December 13, 14, 15 & 16, 2015**

*Note: The final exam schedule in the printed **Fall 2015 Class Schedule** is incorrect. There is a corrected version with the other course documents in Cobra within the “Course Information” module under “Content”.*

*Please Note: Not all possible situations can be covered by one policy. If you feel you have exceptional circumstances that merit waiver of any of these policies, please inform Julie as soon as possible. ****This syllabus may be changed, when needed, according to the instructor’s discretion.**

***Please refer to the “Fall 2015 Syllabus Addendum” for additional information regarding Parkland policies and services. The addendum can be found on the homepage of our Cobra course or in the “Course Information” module under the Content tab in Cobra.