Wright College
Physical Science 111-ABCD Course Syllabus
Fall 2015

COURSE IDENTIFICATION

Course Number:	Physical Science 111-ABCD IAI # P9 900l
Course Name:	General Course I Physical Science
Course Hours:	4 credit hours, 5 contact hours
Course Location:	S333
Class Times:	Tues 12:30-3:20pm Thurs 12:30-2:30pm
Prerequisites:	Eligibility for English 101 and Math 99 or Higher or Consent of Dept. Chairperson

INSTRUCTOR INFORMATION

Instructor:	Dr. Andrew Kruger
Office Location:	L389, Tel. (773) 481-8384
Email:	akruger@ccc.edu
Office Hours:	Mon-Thurs 9:45am – 11:30am
Dept. Secretary:	L378, Tel. (773) 481-8377

COURSE RESOURCES

Required Text:	Earth Science. Tarbuck & Lutgens. 14th Edition, Prentice Hall Co. ISBN: 9780321928092
Course website:	http://ccc.blackboard.com http://akruger.weebly.com (If asked for a password to access anything, use "wright")
Materials:	Calculator, notebook and paper for notes.

COURSE DESCRIPTION

Catalog Description: Introduction to the scientific method, astronomy, geology, meteorology. Writing assignments, as appropriate to the discipline, are part of the course. IAI p9 900l.

Objectives: 1. The student will demonstrate literacy using concepts in physical science in the context of experience outside the classroom.

2. The student will solve problems in physical science with gathering of experimental data.
3. The student will demonstrate competency of individual chapters covered in this course.
4. The student shows ability to compete independent study on course topics.
5. The student understands what career opportunities are available in geology, meteorology, and astronomy.
6. Student can effectively use terms, think critically, and solve problems.
7. Student acquires motor and thinking skills necessary to working directly with the physical environment.

Method of Instruction: Lectures, demonstrations, films and laboratory experiments. Writing will be incorporated in the form of required written summaries for each student laboratory report.

IN-CLASS WORK

Homework: Homework is assigned and completed on-line at http://ccc.blackboard.com. Each homework assignment can be found under "Assignments". You may start a homework assignment and come back to it later by choosing "Save" rather than "Submit". Once submitted, the homework can no longer be worked on. After the due date, students will be able to see which problems they answered correctly/incorrectly. They may then choose to redo the homework, in which case their score will be the average of the two tries. The homework assignments must be submitted on-line by 10:00pm on the due date given on the calendar. After the re-due time and date, correct answers to the questions will be made available to the students. *Late homework will not be accepted*.

Lab Experiments: In-class laboratory experiments will be given throughout the semester. *Because labs require in-class experiments, they cannot be made up if the student is absent, regardless of the reason.* The lowest lab grade will be removed from the final grade.

CLASS PARTICIPATION

Students are expected to participate in class lectures. Questions will be given as part of videos and lectures which students will answer using electronic response clickers. The responses will be graded and will count toward the student's grade. Students must sign in each class with their clickers and be present to answer questions in order to receive credit.

EXAMS

Exams: There will be four unit exams. The lowest test score will be dropped from the final grade. Exams cannot be made up if missed, regardless of the reason. In the case that a test is missed, it will be the score that is dropped. The test must be finished within the allotted class time.

Exit Exam: There will be an exit exam for this course prepared by the department which students are required to pass in order to pass the class. It will also count toward their final grade. If a student does not pass the Exit Exam and is not failing the class, they may take the Exit Exam Appeal.

METHODS OF EVALUATION

Weighted Grading: Students will be evaluated according to the following weighted formula:

Exams	45%
Exit Exam	15%
Homework	15%
Laboratory Reports	15%
Class Participation	10%

Grade Scale: Final grades will be computed according to the following scale:

$90\% \leq A \leq 100\%$
$80\% \leq B < 90\%$
$65\% \leq C < 80\%$
$50\% \leq D < 65\%$
$0\% \leq F < 50\%$

EXPECTED OUTCOMES

Learning Outcomes: Upon successful completion of this course, students will be able to:

a. Distinguish between a rock and a mineral.
b. Match methods of rock formation (sedimentary, metamorphic, igneous) with names of very common rocks.
c. Identify river stages including valley shapes, depositional features, etc.
d. Identify major ground water features and terms including aquifer, cave, stalactite, stalagmite, water table, etc.
e. Identify and compare various glacier depositional features including glacier till, moraines, drumlins, etc.
f. Relate the three earthquake waves (primary, secondary, surface waves) to the identification and location of earthquakes.
g. Describe the use and function of a seismograph and the Richter scale.
h. Identify different types of plate tectonic boundaries and give examples.
i. Contrast three different types of volcanoes (cinder cone, composite cone, shield volcano) and identify igneous intrusive features including sills, dikes, batholiths, etc.
j. Compare various methods used to date the earth including absolute dating, relative dating, law of superposition, radiometric dating, etc.
k. identify layers of the earth's atmosphere.
l. Draw relationships of the geometry of the earth's motion to its effect on seasonal changes.
m. Identify and describe concepts relevant to earth's weather and climate including phase change, evaporation, condensation, relative humidity, etc.
n. Identify various cloud types including cirrus, cumulus, stratus, cumulonimbus, etc.
o. Identify and compare various meteorological instruments including mercurial barometer, aneroid barometer, cup anemometer, etc.
p. Describe the geometry of the earth's motion and its effect on astronomical observation including such terms as rotation, revolution, ecliptic, celestial equator, sidereal day, declination, right ascension, etc.
q. Identify terms associated with the moon's motion including synodic month, solar eclipse, lunar eclipse, etc.
r. Compare methods of receiving and using extraterrestrial incoming light, for example, absorption spectra, doppler effect, etc.
s. Contrast the terms: meteor, meteoroid, meteorite, asteroid, comet.
t. Compare methods of measuring astronomical distance including light year, parsec, apparent magnitude, absolute magnitude as well as identify major star classes in the Hertzsprung-Russell diagram.

COMMUNICATION

Any announcements about the course will be made in class as well as through the "Announcements" section of Blackboard. It is the responsibility of the student to update their email on Blackboard so they will receive any course announcements. Changes to the calendar will be announced, and the calendar on Blackboard will be updated. If students have any questions or concerns, please feel free to email the instructor at akruger@ccc.edu. While the instructor will always try to respond in a timely manner, be warned that any emails sent in the evening may not be received until the following day.

CLASS POLICIES

Classroom Etiquette: Please turn off or silence your cell phones. Food is not allowed in the classroom. Students should maintain a respectful environment for their fellow classmates. Disruptive behavior will not be tolerated and may lead to the student being dismissed from the class.

"No Show" Policy: If a student registered for the course before the start time of the first class period but is absent from the first two class sessions, and has not contacted his/her instructor of intent to pursue the course, he/she will have his/her registration canceled by the college and will be given NSW (no show withdrawal) status.

Active Pursuit: District and college attendance policies are listed in the college catalog and the Student Policy Manual: http://www.ccc.edu/departments/Documents/studentpolicymanual.pdf. Active pursuit of this course constitutes participation in 50% of 1) lectures, 2) homework, 3) quizzes and 4) exams. It also requires the successful completion of 50% of laboratory experiments, where completion refers to attendance, full participation, and submission of a report. *A student who is not actively participating in any one of the areas described above can be dropped at the mid-term and receive a grade of ADW.*

UNIVERSITY POLICIES

Disabilities: Any student with a disability, including a temporary disability, who is eligible for reasonable accommodations should contact the Disability Access Center located in room L135, Learning Resource Center of the Wright North Campus or call (773) 481-8016 as soon as possible.

Academic Integrity: The City Colleges of Chicago is committed to the ideals of truth and honesty. In view of this, students are expected to adhere to high standards of honesty in their academic endeavor. Plagiarism and cheating of any kind are serious violations of these standards and will result, minimally, in receiving a zero for the assignment. In the case of multiple offenses or cheating during an exam, the student will receive a grade of "F" for the course, and further disciplinary action may be taken.

Student Conduct: City Colleges of Chicago students are expected to conduct themselves in a manner which is considerate of the rights of others and which will not impair the educational mission of the College. Misconduct for which students are subject to College Discipline (e.g. expulsion) may include the following: (1) all forms of dishonesty such as stealing, forgery, (2) obstruction or disruption of teaching, research, administration, disciplinary proceeding, (3) physical or verbal abuse, threats, intimidation, harassment, and/or other conduct that threatens or endangers the health or safety of any person, and (4) carrying or possession of weapons, ammunition or other explosives.

SUPPORT SERVICES

Wright College is committed to your success. Below you will find a list of offices you may wish to contact during the semester for assistance:

Academic Support Center (Tutoring)	Room A-245
Center for Academic Success (Advising)	Room A-120
Writing Center (for help with papers)	Room L-212
Wright in Your Corner (Student Center)	Room S-100
Financial Aid	Room A-128
Business Services	Room A-138
Math Tutoring	Room L-125 or L-300
Wellness Center (Personal Counseling)	Room S-132 - (773) 481-8634