



W³GeoLearners General Geology Syllabus

Spring 2010 GEOL 1114

Sections 3PM Tues and 6 PM Tues

Online/Hybrid Format

Instructor:



Wendi J. W. Williams, Ph.D.

Directions to where we're going...

Me



Lecture Hall:

Online through Blackboard J
(Access through
<http://blackboard.nwacc.edu>
or the campus' "My NWACC Connection")

On campus required sessions will generally
be in Burns Hall room 1416. Other locations
will be announced, as needed.

E-Mail:

Please ONLY use our Blackboard e-mail for
class-related correspondence for
this online/hybrid distance learning course,
**Blackboard e-mail is the preferred
method of contact outside of lab.**

All course-related e-mail must be sent through our Blackboard
portal so that our communications stay with the course dataset.
(But if there are particularly extenuating circumstances such as
the server is down for more than half a weekday, then please use
wwilliams@nwacc.edu). *Note: I will check e-mail within the
Blackboard class shell several times during **Mondays through
Fridays** (~ 9 a.m. – 5 PM.). So please plan ahead in your studies and
queries.*

Phone:

I work primarily off campus.
Please contact me via **Blackboard e-mail** mostly.

1.479.935.9079 or Toll Free 1.866.515.0729
(Sciences Department is 479.619.4159 (*Regular Business Hours*))



Please note that this Syllabus document is part of a series of Orientation Materials provided to you through our Learning Modules Tool in BlackBoard. You will also need to use the [Content Schedule](#) and [Performance Tracker](#) files, to name a few.

INSTRUCTIONAL MATERIALS

- **Textbook** (Required for all.) – Physical Geology, 12th Edition by Charles C. Plummer, Diane H. Carlson, and David McGeary, published by McGraw Hill, 2009. (Note: I do have a copy of this on reserve at the campus library.)
- **Lab Manual** (**Required** for all.) – The Laboratory Manual of Physical Geology, 8th Edition (**only**) by the American Geological Institute and the National Association of Geoscience Educators, 2008.
- **Blackboard** (Required for all.) – The **Online/Hybrid Instructional Class** will contain relevant class materials including lecture presentations, class discussions, assignments, quizzes, and exams... as a hybrid, please realize that the MAJORITY of our work is online rather than “face to face” (f2f). VERY IMPORTANT: this Blackboard course is designed to be accessed using a standard, full size computer with reasonable speed (not dial-up modem) access. It **is not** for cell phone formats, or other small scale handheld digital devices. The campus has computer labs for your use if you do not have consistently reliable high speed access from home (be aware that satellite-type internet access is not stable for when you are taking timed quizzes and exams; you should be somewhere with a stable connection when taking those assessments; resets will not be allowed).
- **Ear buds or headphones** to use with a computer, so that you can hear the audio of the online videos (e.g. Earth Revealed series) or other sites.
- I also highly recommend that you buy a small **USB drive** (now less than ~ \$10) for backing-up your data, downloading files, and general portability between our f2f computer use.
- **Mandatory access to scanner or digital camera to take your lab work into digital formats for submission online through BlackBoard. (There is a scanner available in the library.)**

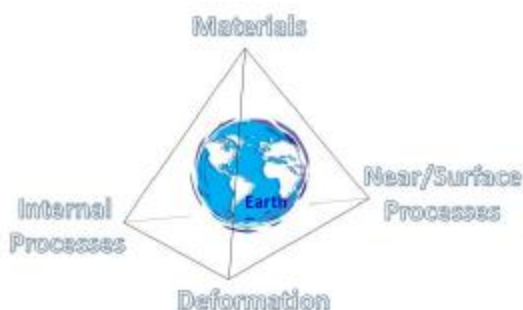
& RESERVE ITEMS

Periodically, you may need access to items outside of class sessions. I will let you know if / when things are put on reserve in at the main campus library for your use. You will need a student identification card for NWACC; these happen to be made at the campus library.



COURSE GOALS

Through active participation in GEOL 1114, the student investigator will explore four general learning goals in science: (1) how scientists learn about the world, (2) how



experiencing the universe *scientifically* differs from other ways, (3) how science impacts values and how society affects science, and (4) how applications of scientific reasoning allows for evaluation of conflicting statements. Active learning techniques to help build critical thinking skills will be applied throughout the course. Writing opportunities, manipulation and treatment of data,

original readings, and a sense of historical perspective are used to facilitate achieving an understanding of the four general goals for science. During each week of the term, the content and subject matter displayed in the **Content Schedule** will be used to demonstrate how courses in geology can be used to fulfill the College curriculum objectives for science. The sequential arrangement of course content reflects the often sequential-nature of scientific learning and discovery (*i.e.* that is the understanding gained from one topic is used to build understanding of the next topic and is progressively a prerequisite for the next topic, etcetera). HOWEVER once more is understood about the fundamentals, I sincerely hope that you will see the interconnectivity of the many topical aspects not only within the geosciences but also the other sciences; mathematics; computer applications; data mining, as well as historical, social and/or political decision-making or daily and/or life-changing events.

NWACC GEOLOGY CURRICULUM OBJECTIVES

The curriculum used in this lecture-laboratory course will help you to:

- ü learn concepts of science from the physical world of geology (subatomic to cosmic).
- ü recognize common rock-forming minerals as well as igneous, metamorphic, and sedimentary rocks used for economic, environmental, and recreational purposes.
- ü understand processes which create rocks, shape the earth, and produce geologic features (such as chemical processes, plate tectonics, and whole-earth physics).
- ü interpret maps, structures and landforms using GIS and remote sensing technology.
- ü recognize and understand geophysical phenomenon, as well as climatic issues and environmental hazards.
- ü apply scientific thought and geologic knowledge of earth resources to practical solutions.
- ü obtain problem solving, critical thinking, communication, and group collaboration skills.



NATURAL SCIENCE OUTCOMES

Scientific Process: Students gain an understanding of the scientific methods and principles of inquiry commonly applied to the geosciences.

Scientific Literacy: Students will possess core scientific knowledge appropriate to freshmen and sophomore years and necessary for success in upper level courses.

Scientific Relevance: Students recognize the implications of science in making choices on personal, community and global issues.

EARTH SCIENCE LITERACY INITIATIVE

From the ESLI Website www.earthscienceliteracy.org :

"The Earth Science Literacy Initiative (ESLI), funded by the National Science Foundation, has gathered and codified the underlying understandings of Earth sciences into a succinct document that will have broad-reaching applications in both public and private arenas. It establishes the "Big Ideas" and supporting concepts that all Americans should know about Earth sciences. The resulting Earth Science Literacy framework will also become part of the foundation, along with similar documents from the Oceans, Atmospheres and Climate communities, of a larger geoscience Earth Systems Literacy effort."

This course has a feature within BlackBoard to allow content and various assessment activities to be linked to specific "goals." I will be starting to use this feature with the newly released (May 2009) "Big Ideas" of the Earth Science Literacy Initiative in order to show you how your efforts at NWACC are part of a larger national effort in science literacy reform and is very competitive with other schools' approach to teaching undergraduate geosciences.

ACTIVE LEARNING

This hybrid/online course provides excellent opportunities for active learning. Much of this course will be different from the traditional face-to-face (f2f) courses that you have taken in the past. Our learning environment uses your textbook (heavily), class notes as powerpoints provided online, guided web resource use, and quizzes/exams, as well as discussion threads about the material, e-mailing questions and answers to problems, projects, and assignments according to the **Content Schedule** provided as part of our online Orientation materials. The short and long of this hybrid approach is that you need to keep-up by working on this course several online sessions each of the eight weeks, outside of f2f sessions on campus. **This will be a challenging course.** You will not get an A, B or C by working 1 or 2 days a week.

***NOTE*:** During f2f sessions, all *audible phones and pagers must be turned off* (unless you are the sole caregiver and emergency contact for a child in pK-12th grade--then set to very low volume or vibrate; however, abuse of this privilege will result in loss of this privilege). Absolutely **NO TEXTING or other diversions during class**. Students not



complying will be dismissed from the class after one warning beyond this syllabus statement (so, it's "two strikes you're out" for our purposes).

! GRADED COMPONENTS AND POINT DISTRIBUTION

A detailed list with possible points is provided in the **Performance Tracker** file provided to you with the online Orientation materials. Overall, there are 2000 total points available in this class. There are five categories for which you are assessed this semester. To earn an "A" in this course, I require you to significantly participate in each of the five categories. Each provides a necessary learning design element in this online/hybrid higher education lab science course. For instance, if you do not complete any Discussion Threads then you will not achieve an "A" regardless of points accumulated in other categories. Likewise, if you do not complete any Laboratories then you will not earn an "A" regardless of points accumulated in other categories. This applies to each of the five categories on the **Performance Tracker**.

Attendance weekly online and during mandatory face2face lab sessions is a required element of this course, as research does demonstrate that regular attendance and participation significantly links with positive retention and success rates in higher education courses—particularly in freshman-level courses (e.g. GEOL 1114). At a minimum, weekly online attendance is required as well as scheduled weekly/bi-weekly face2face lab attendance...otherwise I will block your online access until you speak with me. This course moves quickly and you must stay on task on time for passing completion. Communicate with me if something is keeping you from logging in and doing the work or attending our lab sessions. I may have some suggestions to help you. Also, remember that you are required to attend mandatory "face to face" lab sessions. If absent without advance permission of the Instructor (Dr. Williams), then points will be taken off any pertinent Lab Module and you will potentially forfeit earning an "A" in this course for lack of attendance, as stated here in this course syllabus.

If you have completed work in the five categories outlined in the **Performance Tracker**, then I will base your course grade (worth 4 semester units on your transcript GPA) using the following scale. It is important for you to realize that for the majority of students, enrollees ultimately plan to transfer this lab science course to another institution toward a Bachelors degree. In most Arkansas higher education institutions, a course grade of "D" will not be accepted for transfer. That means I highly suggest you apply yourself to earn a "C" or above.

Using this Letter Grading Scale

- A = 90% or above total points
- B = 80 % to 89% total points
- C = 70% to 79% total points
- D = 60 % to 69% total points
- F = anything less than 60% of total points

Note: I round to the next higher (0.5 or above) or lower point (less than 0.5) .



A grade of "I" (incomplete) is not possible without advance consultation, consent of the Instructor based upon NWACC Policy, and written agreement on the appropriate college form before the scheduled last "face to face" class session.

Attendance: As part of campus procedure, I record and report attendance. With regard to the online aspect of this class, attendance is not just logging into the course shell. You must be completing work to be truly attending this class (note: the improved tracking features now available through Blackboard helps me with this more detailed documentation). Otherwise, it's as if you are merely watching the class through a window in the door; that will not count as attendance and will be reported to the campus for financial aid considerations. Attendance is required in lab sessions; dates are provided in the **Content Schedule** file.

IMPORTANT NOTE: the **drop date is 2 April 2010** to receive a "W" on your transcript. If you chose to withdraw, then you must initiate the drop by filing the correct forms with the Registrar's Office. Do not just stop coming to class. But before you do withdraw, please correspond and/or speak with me about your performance. It may be that I know how well you are performing in relation to your peers and that you may be doing better than you think! *Remember that to be a good steward of your own educational experience, communication and responsibility are keys to success.* And on a more academic success/academic counseling note: it is highly recommended that you limit the number of "W" designations on your transcripts. Future colleges, scholarship panels and even employers often look at transcripts and read multiple "W" as possibly problematic (interpret as lack of responsibility and follow through if chronic).

SOME COLLEGE POLICIES, RULES, AND REGULATIONS

Academic Integrity is mandatory. So please review the following:

Cheating: Students shall not give, receive, offer, or solicit information on examinations, quizzes, etc. This includes the following classes of dishonesty: copying from another student's paper; use during the examination of prepared materials, notes, or texts other than those specifically permitted by the professor; collaboration with another student during the examination; buying, selling, stealing, soliciting, or transmitting an examination or any material purported to be the unreleased contents of a coming examination; or the use of any such material; substituting for another person during an examination or allowing such substitution for oneself; bribery of any person to obtain examination information.

Collusion: Collusion is defined as obtaining from another party, without specific approval in advance by the professor, assistance in the production of work offered for credit, to the extent that the work reflects the ideas of the party consulted rather than those of the person in whose name the work is submitted.

Duplicity: To offer for credit identical or substantially unchanged work in two or more courses, without specific advance approval of the professors involved.



Plagiarism: To adopt and reproduce as one's own, to appropriate to one's own use, and incorporate in one's own work without acknowledgement the ideas or passages from the writings or works of others.

More information on plagiarism and how to avoid it can be found at:

http://www.turnitin.com/research_site/e_home.html

ACADEMIC HONESTY STATEMENT

All students are required to comply with the requirements of the Student Conduct Code as specified in the NWACC Catalog. Plagiarism and cheating will not be tolerated. If plagiarism is suspected, the Instructor may at her discretion take any of the following actions:

1. issue a warning to the student;
2. lower the grade awarded to the student for the assignment;
3. require the student to re-do the assignment;
4. award no credit for the assignment;
5. withdraw the student from the course; or
6. award the student a failing grade for the course.

Finally—and I sincerely wish that this went without saying --in essence, I expect **MUTUAL RESPECT** between the students, faculty and staff. We all deserve this (at a minimum) and *nothing less will be tolerated* by the Instructor.

DISABILITY SUPPORT SERVICES

The Office of DisAbility Services is committed to providing equal opportunities to individuals with disabilities. NorthWest Arkansas Community College endorses and is subject to both the Americans with Disabilities Act and section 504 of the 1973 Rehabilitation Act. Through established procedures, students with disabilities are provided services that assist in minimizing academic barriers by maximizing educational and programmatic access. These services are not intended to give students an unfair advantage but to provide an equal learning environment for all NWACC students.

It is the policy of NorthWest Arkansas Community College to accommodate individuals with disabilities pursuant to federal law and the college's commitment to equal educational opportunities. Every reasonable effort will be made to tailor in person and online courses materials to documented student needs. **It is the responsibility of the student to inform the Instructor of any necessary accommodations at the beginning of the course.** Any student requiring accommodations should contact the Office of Disability and VA Services, located in the Student Center Building room 225



or by calling 479.619.2660. For further information, please see <http://www.nwacc.edu/LSS/disabili.php>

👉 If you qualify for course disability accommodations through our campus' Disability Resource Center, then please **e-mail me and attach a scanned NWACC letter (note: accommodation cards are no longer accepted / please get the official letter from the DisAbility Office)** or tell me the status of information **no later than 26 January 2010 and have Ms. Amy Robertson-Gann send me an e-mail at wwilliams@nwacc.edu** (note: if there is a processing delay, please contact me by the 26th so that I can help you in the interim). Until you and I discuss your accommodations with official notification, you will not receive accommodations. If you delay in this mandatory contact with me, you will not receive any "back" accommodations up until our meeting. So that I may plan for your achieved success in this course, as much advanced notice as possible is greatly appreciated. 👉

VERY IMPORTANT: If you do not notify me until after 26th January, then scores you have received up until the notification date will stand as they were earned without accommodations; this is so that you realize **I REQUIRE you self advocate** to assist me with course management, regardless of campus Center delays.



8 GEOLOGY AND THE WORLD WIDE WEB

There are many Geology/Earth Science resources on the World Wide Web, for example:

American Geological Institute (AGI) <http://www.agiweb.org/>

Arkansas Earthquake Center <http://quake.ualr.edu/>

Arkansas Geological Survey (AGS) <http://www.state.ar.us/agc/agc.htm>

Association of Women Geologists <http://www.awg.org/>

Careers in the Geosciences (Workforce) <http://www.agiweb.org/career/>

Digital Library for Earth System Education www.dlese.org

Earth (formerly known as *Geotimes*- earlier issues at <http://www.geotimes.org>)
<http://www.earthmagazine.org/>

Earth Day Network <http://www.earthday.net/>

Geological Society of America (GSA) <http://www.geosociety.org/>

Google Earth (Free Version) <http://earth.google.com/>

National Association of Black Geologists and Geophysicists
<http://iapetus2.bgsu.edu:1003/nabgg/>

National Association of Geoscience Teachers <http://nagt.org/index.html>

National Association of Science Teachers <http://www.nsta.org/>

NASA Worldwind <http://worldwind.arc.nasa.gov/>

Rockhounding Arkansas <http://rockhoundingar.com/>

Society for the Advancement of Chicanos and Native Americans in Science
<http://www.sacnas.org/>

United States Geological Survey (USGS) <http://www.usgs.gov/>



SUGGESTED JOURNALS MORE SPECIFIC TO SCIENCE EDUCATION



Journal of Chemical Education <http://jchemed.chem.wisc.edu/>



Journal of College Science Teaching <http://www.nsta.org/college>



Journal of Geoscience Education <http://www.nagt.org/jge.html>



Science Books and Films <http://www.sbsonline.com/1a.htm>



Science Scope <http://www.nsta.org/middleschool>



American Biology Teacher <http://www.bioone.org/loi/ambt>



The Physics Teach <http://scitation.aip.org/tpt/?jsessionid=550851093292156242>



The Science Teacher <http://www.nsta.org/middleschool>

