EPSC 1170 - Survey of Earth Science Laboratory - Bennett

Class Location: LBV Science Center, Rm. 108 Instructor: Dr. Marvin E. Bennett Office: LBV Science Center, Rm. 346B Phone: (956) 326 - 2418 Email: mbennett@tamiu.edu Office Hours: TR 10:00-11:00; 12:30-2:00; W 1:30-2:30

Description:

A survey of the natural processes at work in the atmosphere, lithosphere, hydrosphere, and biosphere of the Earth, as well as Earth's place in the universe. Includes an introduction to astronomy, geology, oceanography, and meteorology. Designed to fulfill laboratory science core curriculum requirements. Must be taken concurrently with EPSC 1370.

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

- 1. Use critical thinking and the scientific method to examine questions relating to earth science.
- 2. Collaborate effectively on a research project.
- 3. Communicate scientific information both verbally and through written reports.
- 4. Define and discuss fundamental earth science principles.
- Identify and discuss the characteristics of planets in the solar system. Students will be able to integrate an understanding of how the coupled ocean/atmosphere system controls the earth's weather.
- 6. Students will be able to describe and distinguish the different materials that comprise the earth.

Core-Curriculum Learning Outcomes:

- Critical Thinking: includes creative thinking, innovation, inquiry and analysis, evaluation, and synthesis of information. (SLOs: 1, 5)
- 2. Communication Skills: Students will demonstrate their ability to communicate effectively by using written communication. (SLOs: 3, 4, 5)
- 3. Empirical and Quantitative Skills: includes the manipulation and analysis of numerical data or observable facts resulting in informed conclusions. (SLOs: 4,5)
- 4. Teamwork: includes the ability to work effectively with others to support a shared goal. (SLOs: 2)

Textbook:

Bennett and Tobin, 2009, Earth Science Laboratory Manual, Sixth Edition.

Instruction:

Laboratory exercises, Internet assignments, lecture, class interactions, quizzes and exams.

Policies of the College of Arts and Sciences

Classroom Behavior

The College of Arts and Sciences encourages classroom discussion and academic debate as an essential intellectual activity. It is essential that students learn to express and defend their beliefs, but it is also essential that they learn to listen and respond respectfully to others whose beliefs they may not share. The College will always tolerate diverse, unorthodox, and unpopular points of view, but it will not tolerate condescending or insulting remarks. When students verbally abuse or ridicule and intimidate others whose views they do not agree with, they subvert the free exchange of ideas that should characterize a university classroom. If their actions are deemed by the professor to be disruptive, they will be subject to appropriate disciplinary action, which may include being involuntarily withdrawn from the class.

Plagiarism and Cheating

Plagiarism is the presentation of someone else's work as your own. 1) When you borrow someone else's facts, ideas, or opinions and put them entirely in your own words, you <u>must</u> acknowledge that these thoughts are not your own by immediately citing the source in your paper. <u>Failure to do this is plagiarism</u>. 2) When you also borrow someone else's words (short phrases, clauses, or sentences), you <u>must</u> enclose the copied words in quotation marks

<u>as well as citing the source</u>. <u>Failure to do this is plagiarism</u>. **3**) When you present someone else's paper or exam (stolen, borrowed, or bought) as your own, you have committed a clearly intentional form of intellectual theft and have put your academic future in jeopardy. <u>This is the worst form of plagiarism</u>.

Here is another explanation from the 2010, sixth edition of the *Manual of The American Psychological Association* (APA):

Plagiarism: Researchers do not claim the words and ideas of another as their own; they give credit where credit is due. Quotations marks should be used to indicate the exact words of another. *Each* time you paraphrase another

author (i.e., summarize a passage or rearrange the order of a sentence and change some of the words), you need to credit the source in the text.

The key element of this principle is that authors do not present the work of another as if it were their own words. This can extend to ideas as well as written words. If authors model a study after one done by someone else, the originating author should be given credit. If the rationale for a study was suggested in the Discussion section of someone else's article, the person should be given credit. Given the free exchange of ideas, which is very important for the health of intellectual discourse, authors may not know where an idea for a study originated. If authors do know, however, they should acknowledge the source; this includes personal communications. (pp. 15-16)

Consult the Writing Center or a recommended guide to documentation and research such as the *Manual of the APA* or the *MLA Handbook for Writers of Research Papers* for guidance on proper documentation. If you still have doubts concerning proper documentation, seek advice from your instructor prior to submitting a final draft.

<u>Penalties for Plagiarism</u>: Should a faculty member discover that a student has committed plagiarism, the student will receive a grade of 'F' in that course and the matter will be referred to the Honor Council for possible disciplinary action. The faculty member, however, has the right to give freshmen and sophomore students a "zero" for the assignment and to allow them to revise the assignment up to a grade of "F" (50%) <u>if they believe that the student plagiarized out of ignorance or carelessness and not out of an attempt to deceive in order to earn an unmerited grade.</u> This option is not available to juniors, seniors, or graduate students, who cannot reasonably claim ignorance of documentation rules as an excuse.

<u>Penalties for Cheating</u>: Should a faculty member discover a student cheating on an exam or quiz or other class project, the student will receive a "zero" for the assignment and not be allowed to make the assignment up. The incident must be reported to the chair of the department and to the Honor Council. If the cheating is extensive, however, or if the assignment constitutes a major grade for the course (e.g., a final exam), or if the student has cheated in the past, the student should receive an "F" in the course, and the matter should be referred to the Honor Council. Under no circumstances should a student who deserves an "F" in the course be allowed to withdraw from the course with a "W."

A new grade to denote academic dishonesty is now available, a "M" for "Academic Misconduct." It has the same effect as an "F" but will indicate on the transcript that the failure was due to academic misconduct.

<u>Student Right of Appeal</u>: Faculty will notify students immediately via the student's TAMIU e-mail account that they have submitted plagiarized work. Students have the right to appeal a faculty member's charge of academic dishonesty by notifying the TAMIU Honor Council of their intent to appeal as long as the notification of appeal comes within 3 business days of the faculty member's e-mail message to the student. The *Student Handbook* provides details.

UConnect, TAMIU E-Mail, and Dusty Alert

Personal Announcements sent to students through TAMIU's UConnect Portal and TAMIU E-mail are the official means of communicating course and university business with students and faculty – not the U.S. Mail and not other e-mail addresses. Students and faculty must check UConnect and their TAMIU e-mail accounts regularly, if not daily. Not having seen an important TAMIU e-mail or UConnect message from a faculty member, chair, or dean is not accepted as an excuse for failure to take important action. Students, faculty, and staff are encouraged to sign-up for *Dusty Alert* (see www.tamiu.edu). *Dusty Alert* is an instant cell phone text-messaging system allowing the university to communicate immediately with you if there is an on-campus emergency, something of immediate danger to you, or a campus closing.

Copyright Restrictions

The Copyright Act of 1976 grants to copyright owners the exclusive right to reproduce their works and distribute copies of their work. Works that receive copyright protection include published works such as a textbook. Copying a textbook without permission from the owner of the copyright may constitute copyright infringement. Civil and criminal penalties may be assessed for copyright infringement. Civil penalties include damages up to \$100,000; criminal penalties include a fine up to \$250,000 and imprisonment.

Students with Disabilities

Texas A&M International University seeks to provide reasonable accommodations for all qualified persons with disabilities. This University will adhere to all applicable federal, state, and local laws, regulations and guidelines with respect to providing reasonable accommodations as required to afford equal education opportunity. It is the student's responsibility to register with the Director of Student Counseling and to contact the faculty member in a timely fashion to arrange for suitable accommodations.

Incompletes

Students who are unable to complete a course should withdraw from the course before the final date for withdrawal and receive a "W." To qualify for an "incomplete" and thus have the opportunity to complete the course at a later date, a student must meet the following criteria:

1. The student must have completed 90% of the course work assigned <u>before</u> the final date for withdrawing from a course with a "W", and the student must be passing the course;

2. The student cannot complete the course because an accident, an illness, or a traumatic personal or family event occurred <u>after the final date for withdrawal from a course;</u>

3. The student must sign an "Incomplete Grade Contract" and secure signatures of approval from the professor and the college dean.

4. The student must agree to complete the missing course work before the end of the next long semester; failure to meet this deadline will cause the "I" to automatically be converted to a "F"; extensions to this deadline may be granted by the dean of the college.

This is the general policy regarding the circumstances under which an "incomplete" may be granted, but under exceptional circumstances, a student may receive an incomplete who does not meet all of the criteria above if the faculty member, department chair, and dean recommend it.

Student Responsibility for Dropping a Course

It is the responsibility of the STUDENT to drop the course before the final date for withdrawal from a course. Faculty members, in fact, may not drop a student from a course.

Independent Study Course

Independent Study (IS) courses are offered only under exceptional circumstances. Required courses intended to build academic skills may not be taken as IS (e.g., clinical supervision and internships). No student will take more than one IS course per semester. Moreover, IS courses are limited to seniors and graduate students. Summer IS course must continue through both summer sessions.

Grade Changes & Appeals

Faculty are authorized to change final grades only when they have committed a computational error, and they must receive the approval of their department chairs and the dean to change the grade. As part of that approval, they must attach a detailed explanation of the reason for the mistake. Only in rare cases would another reason be entertained as legitimate for a grade change. A student who is unhappy with his or her grade on an assignment must discuss the situation with the faculty member teaching the course. If students believe that they have been graded unfairly, they have the right to appeal the grade using a grade appeal process in the *Student Handbook* and the *Faculty Handbook*.

Final Examination

Final Examination must be comprehensive and must contain a written component. The written component should comprise at least 20% of the final exam grade. Exceptions to this policy must receive the approval of the department chair and the dean at the beginning of the semester.

NOTE: November 9 is the last day to drop the class

Schedule:

Aug 27, 28	Course Introduction
Sept 3, 4	Lab 1 - Intro to Latitude & Longitude
Sept 10, 11	Lab 2 - Intro to Quadrangle Maps; Quiz 1
Sept 17, 18	Lab 3 - The Hydrologic Cycle & Running Water
Sept 24, 25	Lab 4 - Geological Processes in Dry Lands; Quiz 2
Oct 1, 2	Lab 5 - Shoreline Processes
Oct 8, 9	Lab 6 - Oceanography
Oct 15, 16	Lab 7 - Introduction to Atmospheric Sciences - The Seasons;
	Quiz 3
Oct 22, 23	Lab 8 - Introduction to Atmospheric Sciences - Storm Systems
Oct 29, 30	Lab 9 - Minerals Identification; Quiz 4
Nov 5, 6	Lab 10 - Rock Identification
Nov 12, 13	Lab 11 - Geologic Time
Nov 19, 20	Lab 12 - Planetary Geology
Nov 26, 27	Review for Lab Final
Dec 3, 4	Lab Final

Evaluation:

Lab Completion and Attendance (2 % each; drop lowest)	22 %
Quizzes (15 % each; drop lowest)	45 %
Lab Final Exam	33 %

Quiz 1 will cover basic map reading skills covered during lab 1

Quiz 2 will cover material from labs 2 and 3

Quiz 3 will cover material from labs 4, 5, and 6

Quiz 4 will cover material from labs 7 and 8

Final will be compensative with a strong emphasis on mineral and rock identification, geologic time, and planetary geology

Grade Distribution

 $\begin{array}{l} A \ 100 - 90\% \\ B \ 89 - 80\% \\ C \ 79 - 70\% \\ D \ 69 - 60\% \\ F < 60 \ \% \end{array}$

Laboratory Policies of the EPSC/GEOL Faculty

1. Your lab grade is completely separate from your lecture grade. It is possible to fail lab and pass lecture or vice verse. Either way you will likely be taking both lecture and lab section over again!

2. Students must attend the lab section that they are registered for unless obtaining special permission from their lab instructor.

3. Students need to show up to their lab period on time because helpful information is commonly provided

4. Students must download the lab from the CEES website (http://cees.tamiu.edu), print it out, and bring it to the lab.

5. To get full credit for completion of a lab assignment you need to complete the lab in your own words and attend the entire lab period. Credit will be given only at the end of the lab period.6. Make up quizzes and exams will only be given if arrangements are made with the instructor ideally before but no later than 24 hours after an event.