Environmental Geology GEOL 3443.W01
Department of Physical and Environmental Sciences
Spring 2019

A. COURSE INFORMATION

Course number/section: GEOL3443.W01
Class meeting time and location: Lecture is Online
Laboratory meets face-to-face: TBD
Class/lecture location: N/A
Laboratory location: CI-223
Course Website: https://bb9.tamucc.edu

B. INSTRUCTOR INFORMATION

Instructor: Dr. Dorina Murgulet
Office location: NRC-3103
Office hours: TR 12:00 to 2:30
Telephone: 361-825-2309
e-mail: dorina.murgulet@tamucc.edu
Appointments: If possible please attend the office hours. Nevertheless, please send an email to set up an appointment if you cannot meet during the office hours.

C. COURSE DESCRIPTION

This fully online course is taught via the Web at a distance and is available at http://Bb9.tamucc.edu. The learners may need PowerPoint, spreadsheets, word processing, and other software as needed to complete some requirements of this course.

D. PREREQUISITES AND COREQUISITES

1. Prerequisite course required: GEOL-1403
2. Prerequisite/Co-Requisite course required: SMTE-0094

E. REQUIRED TEXTBOOK(S), READINGS AND SUPPLIES

Textbook: Environmental Geology, Montgomery, 10e (lab manual package)
Online Homework Account: Connect

NOTE: Please purchase the manual from the TAMU-CC bookstore with the CONNECT access code for the GEOL 3443.

Laboratory Requirements:
The laboratory part of this class is face-to-face.

The second part of the laboratory work will be conducted using ArcGIS. Students may be required to bring a laptop (personal or check the library resources) to the class. Students are
also expected to follow step-by-step instructions to go through the exercises. These exercises are using very basic ArcInfo concepts and skills and no GIS fundamentals are needed.

F. STUDENT LEARNING OUTCOMES AND ASSESSMENT

Assessment is a process used by instructors to help improve learning. Assessment is essential for effective learning because it provides feedback to both students and instructors. A critical step in this process is making clear the course’s student learning outcomes that describe what students are expected to learn to be successful in the course. The student learning outcomes for this course are listed below. By collecting data and sharing it with students on how well they are accomplishing these learning outcomes students can more efficiently and effectively focus their learning efforts. This information can also help instructors identify challenging areas for students and adjust their teaching approach to facilitate learning.

A one-semester advanced course for students majoring in science. This course is designed to provide students with a broad spectrum of environmental and geosciences subjects to facilitate greater awareness of the interactions among the different components of the Earth.

The overall objective of this course is to provide the students with improved understanding of environmental geology. Specific objectives of this course include:

➢ To improve the understanding of fundamental concepts of environmental geology
➢ To improve the understanding of interactions between the Earth systems and human activities
➢ To learn to interpret environmental data for process studies
➢ To improve the ability in critical thinking, writing and speaking of selected environmental science issues.

G. INSTRUCTIONAL METHODS AND ACTIVITIES

The following instructional methods and activities will be used: Lecture Power Points, Homework and Quizzes, Learn Smart, and Discussion Board.

Required Readings

Textbook: Environmental Geology, Montgomery, 10e
Online Homework Account: Connect

Course Schedule
Reading Assignments from the Textbook

- Chapter 1- Planet and Population: An Overview
- Chapter 2- Rocks and Minerals—A First Look
- Chapter 3- Plate Tectonics
- Chapter 4- Earthquakes
• Chapter 5-Volcanoes
• Chapter 6- Streams and Flooding
• Chapter 7- Coastal Zones and Processes
• Chapter 8- Mass Movements
• Chapter 9- Ice and Glaciers, Winds and Deserts
• Chapter 10- Climate—Past, Present, and Future
• Chapter 11- Ground Water and Water Resources
• Chapter 12- Weathering, Erosion, and Soil Resources
• Chapter 13- Mineral and Rock Resources
• Chapter 14- Energy Resources—Fossil Fuels
• Chapter 15- Energy Resources—Alternative Sources
• Chapter 16- Waste Disposal
• Chapter 17- Water Pollution
• Chapter 18- Air Pollution
• Chapter 19- Environmental Law and Policy
• Chapter 20- Land-use Planning and Engineering Geology

Connect Homework: When you start working on a chapter,
• first read the chapter,
• then look at the power point
After you feel comfortable with the material, start working on Learn Smart. This is fun homework to do and you can work on it until you get 100%. Then work on Homework (Assignment). You do not have unlimited tries on homework, so do not answer it randomly. Finally, take the chapter quiz. Your homework is extra credit and can help you improve your overall class performance (some of the homework questions will be repeated in quizzes and exam).

Evaluation:

<table>
<thead>
<tr>
<th>Module</th>
<th>Quiz</th>
<th>Assignment</th>
<th>Learn Smart</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module 1</td>
<td>10</td>
<td>1</td>
<td>10</td>
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<tr>
<td>Module 2</td>
<td>10</td>
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<td>Module 3</td>
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<tr>
<td>Module 4</td>
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<tr>
<td>Module 5</td>
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</table>
Term paper

All Students:
Anything in the realm of Environmental Geology that interests you is fair game. Remember, a short paper in which the subject matter is treated concisely is better than a long, rambling discourse of mismatched ideas and quotations. Quotations are okay if kept to a minimum. But be careful; do not use quotations as authoritarian arguments without sufficient scientific backing and referencing. Submit your paper digitally as a Word attachment with a cover sheet (title, name, class, etc. see complete instructions online). The rationale for doing a paper is to demonstrate an increased amount of knowledge in your chosen subject, above what you would have known had you not taken this course. The paper should demonstrate knowledge of scientific and/or environmental principles that pertain to your subject. Check with the professor for ideas or if you are uncertain of the appropriateness of your topic.

<table>
<thead>
<tr>
<th>Grading of Term Project</th>
<th>Undergrad</th>
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<tbody>
<tr>
<td>Understanding of topic</td>
<td>25</td>
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<tr>
<td>Use of literature, citations</td>
<td>20</td>
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</table>
Class Grade:

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
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<tbody>
<tr>
<td>Quizzes and Learn Smart</td>
<td>305</td>
</tr>
<tr>
<td>Final Exam</td>
<td>200</td>
</tr>
<tr>
<td>Term Paper</td>
<td>195</td>
</tr>
<tr>
<td>Lab assignments/ quizzes</td>
<td>300</td>
</tr>
<tr>
<td><strong>Final Total Grade</strong></td>
<td>1,000</td>
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</table>

**Total possible points 1,020 including bonus points**

**Assignment Grades** are extra points that will be added to your “Final Total Grade”. You can accumulate up to 50 extra points by completing all the assignments. I highly encourage you to take advantage of these extra points because some of the questions in quizzes and final exam are similar to the assignment questions.

**Introduction Discussion and Class Discussion:** Before you start the course, you introduced yourself to your classmate and get 8 extra points that is added to your final grade. The other 12 extra points are from the discussions that will be assigned during the semester.

Grade scale:

- **A** = 90-100%
- **B** = 80-90%
- **C** = 70-80%
- **D** = 60-70%
- **F** = 0-60%
<table>
<thead>
<tr>
<th>Module</th>
<th>Due Date</th>
<th>Content/Assignments</th>
<th>Where and how to submit</th>
</tr>
</thead>
</table>
| Module 1 folder – Ch. 1 | January 21, 2019 | All these links are available in your Module 1 folder:  
1. Read Chapter 1 and answer questions in Learn Smart  
2. Complete extra points Assignment  
3. Take Quiz (in class/lab) | Connect |
| Module 2 folder – Ch. 4&5 | January 28, 2019 | All these links are available in your Module 2 folder:  
1. Read Chapters 4&5 and answer questions in Learn Smart  
2. Complete extra points Assignment  
3. Take Quiz (in class/lab) | Connect |
| Module 3 folder – Ch. 6 | February 4, 2019 | All these links are available in your Module 3 folder:  
1. Read Chapter 6 and answer questions in Learn Smart  
2. Complete extra points Assignment  
3. Take Quiz (in class/lab) | Connect |
| Module 4 folder – Ch. 7 | February 11, 2019 | All these links are available in your Module 4 folder:  
1. Read Chapter 7 and answer questions in Learn Smart  
2. Complete extra points Assignment  
3. Take Quiz (in class/lab) | Connect |
<table>
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<tr>
<th>Module</th>
<th>Folder – Ch.</th>
<th>Date</th>
<th>Term Paper Topic Due</th>
<th>Spring Break</th>
<th>No evaluation</th>
<th>Connect</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>8</td>
<td>February 18, 2019</td>
<td>All these links are available in your Module 4 folder: 1. Read <strong>Chapters 8</strong> and answer questions in Learn Smart 2. Complete extra points Assignment 3. Take Quiz (in class/lab)</td>
<td></td>
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<td>Connect</td>
</tr>
<tr>
<td>6</td>
<td>9</td>
<td>February 25, 2019</td>
<td>All these links are available in your Module 5 folder: 1. Read <strong>Chapter 9</strong> and answer questions in Learn Smart 2. Complete extra points Assignment 3. Take Quiz (in class/lab)</td>
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<td>Connect</td>
</tr>
<tr>
<td>7</td>
<td>10</td>
<td>March 4, 2019</td>
<td>All these links are available in your Module 7 folder: 1. Read <strong>Chapters 10</strong> and answer questions in Learn Smart 2. Complete extra points Assignment 3. Take Quiz (in class)</td>
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<td>Connect</td>
</tr>
<tr>
<td>8</td>
<td>11</td>
<td>March 11, 2019</td>
<td>All these links are available in your Module 8 folder: 1. Read <strong>Chapters 11</strong> and answer questions in Learn Smart 2. Complete extra points Assignment 3. Take Quiz (in class)</td>
<td>Spring Break</td>
<td>N/A</td>
<td>Connect</td>
</tr>
<tr>
<td>No evaluation</td>
<td>March 11, 2019</td>
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<tr>
<td>8</td>
<td>11</td>
<td>March 18, 2019</td>
<td><strong>Term Paper for Group Review Due</strong></td>
<td></td>
<td></td>
<td>Connect</td>
</tr>
</tbody>
</table>
| Module 9 folder – Ch. 12 | March 25, 2019 | All these links are available in your Module 9 folder:  
1. Read Chapters 12 and answer questions in Learn Smart  
2. Complete extra points Assignment  
3. Take Quiz (in class) | Connect |
|--------------------------|---------------|-------------------------------------------------------------------------------------------------|-------|
| Module 10 folder – Ch. 13| April 1, 2019 | All these links are available in your Module 10 folder:  
1. Read Chapters 13 and answer questions in Learn Smart  
2. Complete extra points Assignment  
3. Take Quiz (in class/lab) | Connect |
| Module 11 folder – Ch. 14&15 | April 8 2019 | All these links are available in your Module 11 folder:  
1. Read Chapters 14 and 15 and answer questions in Learn Smart  
2. Complete extra points Assignment  
3. Take Quiz (in class/lab) | Connect |
| Module 12 folder – Ch. 16 | April 15, 2019 | All these links are available in your Module 12 folder:  
1. Read Chapters 16 and answer questions in Learn Smart  
2. Complete extra points Assignment  
3. Take Quiz (in class/lab) | Connect |
| Module 13 folder – Ch. 17&18 | April 22, 2019 | All these links are available in your Module 13 folder:  
1. Read Chapters 17&18 and answer questions in Learn Smart  
2. Complete extra points Assignment  
3. Take Quiz (in class/lab) | Connect |
Module 14 folder – Ch. 20  All these links are available in your Module 14 folder:
1. Read Chapter 20 and answer questions in Learn Smart
2. Complete extra points Assignment
3. Take Quiz (in class/lab)  Connect

Final Exam  May 7, 2018  Final exam  Connect/Includes essay questions

Note 1: We will not have a module on Rocks and Minerals, Plate Tectonics, and Environmental Law and Policy but the final exam may include a few questions from each reading. It is highly recommended that you read these chapters as well.

Note 2: Changes in this course schedule may be necessary and will be announced to the class by the Instructor. The assignments and exams shown are directly related to the Student Learning Outcomes described in Section F.

H. COURSE POLICIES

Lab Attendance Policy
- **Lab attendance is mandatory.** One excused absence (with documentation) will be allowed but will result in the removal of that grade from the average. Unexcused absences result in a zero. It is the students’ responsibility to acquire the missed material from their peers.

Time Requirements
Regular 3-credit hour courses require approximately 3 hours of class time per week plus 9 hours of study time. Therefore, expect to spend a minimum of 12 hours each week for 15 weeks on this class. Because this is an online course, you may have to spend even more time than 12 hours some weeks.

Late Work
Specific due date on any assignment/quizzes are assigned (please see schedule); you need to complete all the assignment, quizzes, learn smart, and final exam before May 5th. Late work will only be accepted if a credible excuse is provided ahead of time.

Grades of "INCOMPLETE" will be given only for certifiable medical reasons or in other extraordinary circumstances. Requests for incompletes must be made in writing and must include:
- Documentation
- Advanced notice
- Date that coursework will be submitted
If the coursework is not submitted by that date, the Incomplete will become permanent.
I. COLLEGE AND UNIVERSITY POLICIES

Academic Integrity/Plagiarism
It is expected that university students will demonstrate a high level of maturity, self-direction, and ability to manage their own affairs. Students are viewed as individuals who possess the qualities of worth, dignity, and the capacity for self-direction in personal behavior. See Full University Policy at [http://catalog.tamucc.edu/content.php?catoid=10&navoid=313#Academic_Integrity](http://catalog.tamucc.edu/content.php?catoid=10&navoid=313#Academic_Integrity).

Academic misconduct for which a student is subject to penalty includes all forms of cheating, such as illicit possession of examinations or examination materials, falsification, forgery, complicity or plagiarism. (Plagiarism is the presentation of the work of another as one’s own work.) In this class, academic misconduct or complicity in an act of academic misconduct on an assignment or test will result in (letter grade of F).

Deadline for Dropping a Course with a Grade of W (University)
The grade of W will be assigned to any student officially dropping a course. Please consult with the instructor before you decide to drop to be sure it is the best thing to do. Just stopping attendance and participation WILL NOT automatically result in your being dropped from the class. Should dropping the course be the best course of action, visit the Office of the University Registrar for the Course Drop Form that must be submitted. No student is eligible to receive a W without completing the official drop process by this deadline. Please consult the Academic Calendar ([http://www.tamucc.edu/academics/calendar/](http://www.tamucc.edu/academics/calendar/)) for the last day to drop a course.

Classroom/professional behavior
Texas A&M University-Corpus Christi, as an academic community, requires that each individual respect the needs of others to study and learn in a peaceful atmosphere. Under Article III of the Student Code of Conduct, classroom behavior that interferes with either (a) the instructor’s ability to conduct the class or (b) the ability of other students to profit from the instructional program may be considered a breach of the peace and is subject to disciplinary sanction outlined in article VII of the Student Code of Conduct. Students engaging in unacceptable behavior may be instructed to leave the classroom. This prohibition applies to all instructional forums, including classrooms, electronic classrooms, labs, discussion groups, field trips, etc.

Statement of Civility (can be in place of classroom/professional behavior)
Texas A&M University-Corpus Christi has a diverse student population that represents the population of the state. Our goal is to provide you with a high quality educational experience that is free from repression. You are responsible for following the rules of the University, city, state and federal government. We expect that you will behave in a manner that is dignified, respectful and courteous to all people, regardless of sex, ethnic/racial origin, religious background, sexual orientation or disability. Behaviors that infringe on the rights of another individual will not be tolerated.

Grade Appeals (College of Science and Engineering Version)
As stated in University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures, a student
who believes that he or she has not been held to appropriate academic standards as outlined in
the class syllabus, equitable evaluation procedures, or appropriate grading, may appeal the final
grade given in the course. The burden of proof is upon the student to demonstrate the
appropriateness of the appeal. A student with a complaint about a grade is encouraged to first
discuss the matter with the instructor. For complete details, including the responsibilities of the
parties involved in the process and the number of days allowed for completing the steps in the
process, see University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures. These
documents are accessible through the University Rules website at
http://www.tamucc.edu/provost/university_rules/index.html, and the College of Science and
Engineering Grade Appeals webpage at http://sci.tamucc.edu/students/GradeAppeal.html. For
assistance and/or guidance in the grade appeal process, students may contact the chair or director
of the appropriate department or school, the Office of the College of Science and Engineering
Dean, or the Office of the Provost.

**Statement of Academic Continuity**
In the event of an unforeseen adverse event, such as a major hurricane and classes could not be
held on the campus of Texas A&M University–Corpus Christi; this course would continue
through the use of Blackboard and/or email. In addition, the syllabus and class activities may be
modified to allow continuation of the course. Ideally, University facilities (i.e., emails, web sites,
and Blackboard) will be operational within two days of the closing of the physical campus.
However, students need to make certain that the course instructor has a primary and a secondary
means of contacting each student.

**Related Issues**
Online courses require time management and planning on your part. You cannot afford to get
behind since many topics and assignments are based on the skills and products of previous
assignments; there is no meaningful way to "cram." Contact me if you are having any problems
with assignments.

There is a reliance on technologies in this course that impacts the need to have assignments done
on time. Having ample time to complete an assignment will be the responsibility of the student.
It is also the student's responsibility to find solutions to technical problems with sufficient time to
complete the required tasks. Do not wait until a due date is near to discover/report lack of access
to software, inability to connect to a network, etc. While the instructor will help wherever
possible, it is the students' responsibility to maintain his or her network. However, technical
problems can originate on the TAMU-CC campus, in which case you will not be responsible to
complete work that you cannot complete due to TAMU-CC network or software problems. You
are responsible for contacting me as soon as you detect a problem so that we can arrange a way
for you to meet the course objectives.

**Disability Services**
The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides
comprehensive civil rights protection for persons with disabilities. Among other things, this
legislation requires that all students with disabilities be guaranteed a learning environment that
provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please call (361) 825-5816 or visit Disability Services in Corpus Christi Hall 116.

If you are a returning veteran and are experiencing cognitive and/or physical access issues in the classroom or on campus, please contact the Disability Services office for assistance at (361) 825-5816.

http://disabilityservices.tamucc.edu/

J. OTHER INFORMATION

- **Academic Advising**
  The College of Science & Engineering requires that students meet with an Academic Advisor as soon as they are ready to declare a major. The Academic Advisor will set up a degree plan, which must be signed by the student, a faculty mentor, and the department chair. Meetings are by appointment only; advisors do not take walk-ins. Please call or stop by the Advising Center to check availability and schedule an appointment. The College’s Academic Advising Center is located in Center for Instruction 350 or can be reached at (361) 825-3928.

K. Syllabus Disclaimer

This syllabus has been created as a guide to the class and is as accurate as possible. However, all information is subject to change. Any changes will be posted on the Blackboard Learning System’s Announcements.

L. Technical Support and Requirements

**Blackboard Learning System Help**: [http://iol.tamu.edu](http://iol.tamu.edu)

“Help” At the bottom of the Blackboard Course Management Control Panel in the course menu on the left hand column of the course interface. Phone: Help Desk (361) 825-2825

**Island Online Student Resources Webpage**: [https://distance-education.tamucc.edu/student_resources.html](https://distance-education.tamucc.edu/student_resources.html)

**Getting Technical Help**

If you are having difficulties accessing course materials from your home computer, first let your instructor know, then contact the IOL Helpdesk at (361)825-2692 or submit a request via email to iol.support@tamucc.edu

**Technology Requirements**

To prepare your computer for using Blackboard 9.1, go to [https://iol.tamu.edu/techreq.php](https://iol.tamu.edu/techreq.php) for computer requirements.

- To view .pdf files you will need the Adobe Reader. Download it at:
Navigating Blackboard 9.1
Once you are in the course, read the “Announcements” on the home page. Check this each time you enter your course. You will see a Course Menu on the left of the page. The menu is a list of links that connect to materials and tools associated with the course. Blackboard has several features and tools for communicating content delivery that you should use almost daily. Links to information about how to use these tools include: Bb Help, which contains a complete guide to learning how to use the many tools and features in Blackboard, and Bb Video Tutorials, which links to a page with videos to show you how to do tasks such as submitting an assignment.

Library resources (including print, electronic, and human) can be accessed through the Mary and Jeff Bell Library website that supports electronic searches of articles, books, journals, course reserves, and databases. It includes information such as Ask a Librarian, research tools, remote access information and tutorials, information about plagiarism and copyright, and interlibrary loan (http://rattler.tamucc.edu/distlearn/). The library is a member of TexShare which provides you with a card that allows you to checkout materials from libraries across Texas. Librarians’ contact information is also on the website and you are encouraged to contact librarians for assistance.

In the event of a campus evacuation I will make every effort to continue teaching your course. Should such an event occur, I will continue to interact with you by using the Blackboard Announcement, Messages, Collaboration, Discussions, Blogs, Journals, and/or Wikis tools. If you have access to the Internet, you will be able to continue your coursework by posting assignments and interacting with me as well as each other online. You will also be able see your grades on assignments, quizzes, and tests using the My Grades tool.

Online Course Guidelines

Students will practice respect and responsibility as a part of this learning community. Here are some things you can do to exhibit an attitude of respect and responsibility:

- Post assignments on time. Early is even better.
- Work extra hard to get to know other classmates.
- Reach out through email Blackboard Messages, Discussions, and Wikis to support each other. If you have good info/tips on what is working for you/resource ideas, please share with the group so we can help each other out.
- Respect other classmates by watching what you say.
- Add your opinions to/participate in the discussions.
- Check the assignments every week. Don’t wait until the last minute.
- Be helpful to other students
- Don't get behind. If you get behind in an online course it is harder to get back on track than it is in a traditional course.
• Stay focused and stay connected.
• Keep up with your assignments and your grades. It is not the teacher's responsibility to tell you what you have or haven't turned in. Your grades will be available in Blackboard so all you have to do is regularly check to make sure you have grades posted for all work.
• In general terms, students are expected to "demonstrate a high level of maturity, self-direction and ability to manage their own affairs" and to "conduct themselves in accordance with the highest standards of academic honesty." Instances of plagiarism will be handled in accordance with Texas A&M University-Corpus Christi General Academic Policies and Regulations as listed in the current catalog.

Delivery of instructor feedback – During the week (exclude weekends), Instructor response to online requests usually occurs within a 24-hour period, but you can expect a response within 3 days.

Student login expectations - Students are required to login often – once every three days at a minimum. It is recommended that students check daily for announcements and updates.

Faculty availability to support students - I maintain a consistent web presence and am available to meet online in the Blackboard asynchronous or synchronous environment or via phone.

M. GENERAL DISCLAIMER
I reserve the right to modify the information, schedule, assignments, deadlines, and course policies in this syllabus if and when necessary. I will announce such changes in a timely manner during regularly scheduled lecture periods.