

Dillard College of Business Administration

Syllabus: Energy Management

MGMT 4313

Fall Semester 2022

Contact Information

Instructor: Jeff Stambaugh, Associate Professor of Management

Office: DB 233

Office hours: MW 9:00 am to 11:00 am, T 4:00 – 5:00 pm and by appointment. Zoom Office Hours ID: 576 769

3651 (you will enter the waiting room, and I'll bring you into the video conference)

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Zoom Link: https://msutexas-edu.zoom.us/j/97915798690?pwd=RXZvK085Q1ZaV0Z1WnBZQzN5MWtTUT09

Course Materials

1. A PC/laptop/tablet with webcam capability (Chromebooks won't work due to insufficient computing power).

Additional readings are posted to D2L

Course Description

A study of global energy trends, with an examination of the major businesses involved in meeting current and future energy needs.

Learning Goals

- I. General Learning Goals:
 - Our students will be effective at problem solving and decision making. The course highlights the various levels of integration and strategic partnerships used by energy firms, which are all complex issues where problems routinely arise.
 - Our students will understand issues related to globalization and international business. The energy industry operates in the intersection of geology, technology, capital, geopolitics, and the world economy.

These general learning goals are among those established by the Dillard College of Business Administration. General learning goals represent the skills that graduates will carry with them into their careers. While assessing student performance in obtaining these general learning goals, the Dillard College is assessing its programs. The assessments assist us as we improve our curriculum and curriculum delivery.

- II. Course Specific Learning Goals: After completing this course, students should be able to:
 - Understand the global trends that drive demand and the need for sustainability
 - Understand the essential global economic and geopolitical forces that drive energy prices.
 - Understand the agreements involved between land/mineral owners and energy companies to develop and produce energy
 - Know the language, processes, and basic cost structure for oil and gas exploration and production (E&P) as well as wind and solar

- Know the basics for how energy operations are funded.
- Understand the various energy distribution processes
- Understand the environmental tradeoffs associated with all forms of energy production
- Understand the technical issues and potential of energy advances.

Course Policies

Attendance Policy: Regular attendance is expected, either by sitting in the classroom in Wichita Falls or teleconferencing via Zoom. Participation in class discussion is graded, so reading the assigned material and completing assignments prior to coming to class is also expected. See the university catalog for the University Class Attendance Policy.

Other Related Policies

Missed Examination Policy: Only students with authorized absences (see University Class Attendance Policy) may make up missed examinations. All examinations are accessed via D2L and remotely proctored. If the time windows scheduled for the examinations don't work well for you, please contact me well before the window opens to arrange an alternate time.

Grading and Evaluation:

Exams (3): Exams are composed of true/false, multiple choice, fill-in-the-blank and short answer questions. Learning the energy industry's language is a central goal for this course. There are three vocabulary lists, with approximately 20 terms per list. I test the terms from VQ1 on Exam 1, VQ2 on Exam 2, and VQ3 on Exam 3. There will be a 30-hour window for students to take the exam online. Students access the exam through D2L and use a remote proctoring service called Respondus Monitor. If I learn of students sharing the exam contents in any way, that's a breach of academic integrity on all parties' part. Please don't do that, as I don't want to give everyone involved a 0 for the exam (and potentially an F for the course).

Energy Discussion (Packback): I'm using a new tool called Packback to allow students to pose questions that interest them and then respond to two other student questions. The discussion requirements align with the exams.

Participation: Class time is mainly discussion versus lecture, and thus your participation is essential. Also, we'll have the privilege of having many industry experts speak with the class. Again, it's essential you engage with our quests.

Table 1: Points allocated to each assignment

Element	Points
Exams (3 @ 160 pts each)	480
Participation	50
Energy Discussion	80
Total Points	610

Table 2: Grading System

Grade	Points	
A	549 or greater	
В	488 to 548	
С	427 to 487	
D	366 to 426	
F	Less than 365	

Semester grades will be reported through normal University channels with no exceptions.

Grading Policies:

My intent is to motivate and educate you toward excellence. Therefore, for each assignment you will see a clear explanation of what constitutes excellent work. My written comments back to you usually focus on what was excellent about your work rather than what was wrong. However, I will be quite clear on why a piece was unsatisfactory in the unlikely case that you submit less than satisfactory (C or less) work.

Course Content and Outline:

- 1. Introduction and Geology
 - A. Introduction to the energy industry
 - B. Geology of petroleum and critical minerals
 - C. Acquiring land and mineral rights in the U.S.
- 2. Drilling and producing oil & gas
 - A. Drilling, completing and producing a well
 - B. Constructing and operating a wind/solar farm
 - C. Financial requirements for energy projects
- 3. Getting energy to market, with a focus on future needs
 - A. Energy distribution
 - B. New technologies for storage, carbon capture, and transportation
 - C. Regulatory and environmental challenges

The North Texas Opportunity:

Wichita Falls and the Metroplex have long been the home to numerous oil and gas businesses, and they have ties throughout the energy industry. We intend to capitalize on this opportunity by having guest speakers visit the class and by taking field trips to the "oil patch."

Guest Speakers: I expect you to arrive prepared to ask good questions and excited to use the time available to learn from our guests.

Field Trips: Virus permitting and if there is sufficient interest, I hope to take three field trips as part of the course, one to a drilling rig, one to an operating lease, and one to a wind farm. These field trips are all voluntary (but highly instructive!) and occur outside the scheduled class periods. Shortly after the semester begins I'll canvas the class for what times and dates would work for most class members. I'll attempt to get these field trips scheduled soonest so you have the maximum lead time possible to adjust your personal schedule.

Academic Integrity:

With regard to academic honesty, students are referred to the "Student Honor Creed" in the graduate catalog. Academic dishonesty (cheating, collusion, and plagiarism) is taken seriously and investigated. **Please understand that integrity is very important to me**.

Americans with Disabilities Act:

If a student has an established disability as defined by the Americans with Disabilities Act and would like to request accommodation, that student should please contact me as soon as possible. Any student requesting accommodations should also contact Disability Support Services at 940-397-4140 in room 168 Clark Student Center to document and coordinate reasonable accommodations if you have not already done so.

Syllabus Change Policy:

This syllabus is a guide for the course—not a "contract"—and is subject to change. Syllabus changes will be communicated via D2L and/or in class. I'll provide a minimum of 48 hours' notice before the relevant change takes place if at all possible.

Additional Information:

Written Assignments: All written assignments are to be **single-spaced**, have one inch margins, and use an 11 or 12-point font (specific font must present a business appearance and be similar in "size" to Times New Roman or Arial) and be uploaded to D2L in a **MS Word or PDF file format** (not Pages!).

Assignments: Assignments are due at the specified due date/time. By definition, professionals are not late with their work.

Words of Wisdom / General Policies: Perhaps the most important thing you can understand about me is that I am deeply interested in your success, both in the course and beyond. I am convinced this course can set the stage for your future success. Therefore, I invest significant time and effort into this course and hope you'll do the same. Just as in the "real world," I try to run my course in a supportive yet professional and business-like manner. Here are some key points for professional behavior:

- The assignments you hand in should reflect your professionalism
- Class time is like a business meeting:
 - Be on time!
 - Laptops and smart phones are for course use during class—not surfing, emailing, texting, or networking. Incidentally, lots of studies show note taking by computer is not as effective as note taking by hand.
- I can be very flexible and cooperative about course events and due dates when you raise an issue with me before a class or due date. Notifications after the fact are almost always indicative of unprofessionalism
- All communications must reflect respect for all parties.
- Integrity is the bedrock for successful business relationships. True in the course too!

Professionalism:

The faculty, staff, and students of the Dillard College of Business Administration are committed to being a "professional" in our words, conduct, and actions. The qualities of a professional include:

- A commitment to the development of specialized knowledge
- Competency in analytical, oral and written communication skills
- Self-discipline
- Reliability

- · Honesty and integrity
- Trustworthiness
- Timeliness
- Accountability for words and actions
- · Respect for others and other cultures
- · Politeness and good manners
- A professional image (professionals look professional)
- · An awareness of their environment and adaptability to different settings
- Confidence without arrogance
- A commitment to giving back to your community

COVID 19 Policies

If you are feeling ill and suspect it could be COVID, please do not attend the physical classroom session and instead attend class via the Zoom live stream.

Course Flow

Please keep this syllabus as a reference. Students are responsible for all information contained in the syllabus and for any changes to the syllabus, which are announced in class or on D2L. I typically adhere closely to the original syllabus in my classes. However, the guest speakers and special events put some schedule uncertainty into the mix. Thus, I expect some schedule changes as the course progresses.

Course Schedule

Table 3: The below table has the class meeting date(s), topics, and associated readings, as well as the quizzes and exams for each module

Date	Major Topic or Activity	Reading	Due
8/22	Course Intro and the basics of energy		
8/29	CO ₂ and Global Energy	W	
9/5	Geology of petroleum and critical materials (No Class Meeting – Just D2L materials)	W	
9/12	Energy Industry—Current Status	W	
9/19	Mineral Rights Leasing	W	
9/22	Exam 1		Exam 1 Window 9/22 5 pm – 9/23 11 pm
9/26	Drilling and Completing a Well + Costs	W	
10/3	O&G Financial Assessment (Drilling Info)	W	
10/10	Wind and Solar Economics	W	
10/17	Operating energy projects over the long term	W	
10/24	Financing options for energy projects	W	
10/27	Exam 2		Exam 2 Window 10/27 5 pm – 10/28 11 pm
10/31	Energy Distribution Systems	W	
11/7	Regulatory and Environmental Issues	W	
11/14	Hydrogen, Carbon Capture & Storage Potential	W	
11/21	Guest Speakers	W	
11/28	Energy Papers and Presentation		
12/7	Exam 3 (8-10 pm)		Window: 12/6 5 pm – 12/7 11 pm

W = Additional readings are posted to D2L

VQ = Vocabulary quiz