Dillard College of Business Administration

Syllabus: Energy Management
MGMT 5313
Fall Semester 2020

Contact Information

Instructor:	Jeff Stambaugh, Associate Professor of Management (Mr. Mark Carter is also assisting)
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/95989592284?pwd=ek1XWXRwWDZvNU8xTjFBcDY0REUrZz09
Zoom Data:	Class Meeting ID: 959 8959 2284 Passcode: 0x785q

Course Materials

1. Denehy, D. 2011. *Fundamentals of Petroleum, 5e.* PETEX: Austin, TX. ISBN: 978-0-88968-231-7. This is an expensive book so I have loaners available for the semester if students don't wish to purchase the textbook.
2. A PC/laptop/tablet with webcam capability (Chromebooks won't work due to insufficient computing power).

Additional readings are posted to D2L

Course Description

Focuses on terminology, concepts, and business issues that are particularly important to the energy industry. Topics include drilling and production terminology and concepts, an introduction to the importance of geology and geographic information systems to the oil and gas industry, negotiations, and land management. An emphasis is placed on the importance of the ownership of mineral interests and the process for determining such ownership. The process for obtaining mineral lease rights is examined.

Course Prerequisite(s)

BUAD 5006 or equivalent and consent of Graduate Coordinator.

Learning Goals

I. General Learning Goals:

- Our students will integrate knowledge across business disciplines. The course highlights the various levels of integration and strategic partnerships used by energy firms.
- Our students will produce creative responses to business situations. The energy industry operates in the intersection of geology, technology, capital, geopolitics, and the world economy. Appreciating the dynamism within the energy industry requires synthesis from these diverse areas.

- Our students will communicate at a professional level. Students practice their oral presentation skills through in-class presentations. The Situation Analysis paper shall also be assessed for writing ability.

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 essential global economic and geopolitical forces that drive the price of oil and gas.
- Understand the language and concepts of petroleum geology and obtaining the right to explore and produce the minerals.
- Know the language, processes, and basic cost structure for oil and gas exploration and production (E&P).
- Understand how the midstream and downstream industries affect the profitability of E&P operations
- Know the basics for how E&P operations are funded.
- Understand the parallels between so-called renewable sources and the E&P industry.

Course Policies

One hybrid course, two ways to attend: You can attend face-to-face in Wichita Falls on Tuesday evenings (7:00 to 8:20 pm). If preference or schedule needs dictate that you can't attend face-to-face, you can participate via videoconference using the D2L (Zoom) system. You just log in each Tuesday evening from 7:00 to 8:20 pm regardless of your physical location. The reason we can offer students such flexibility is that the course is hybrid: many of the lectures are online with the class sessions reserved for discussions, guest speakers, and presentations.

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:

Vocabulary Quizzes (3): Learning the oil and gas industry's language is a central goal for this course. Consequently, we'll have quizzes on three vocabulary lists, with approximately 20 terms per list. There will be a 30-hour window for students to take the quiz online. Students access the quiz through D2L and use a remote proctoring service called Respondus Monitor. If I learn of students sharing the quiz 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 quiz (and potentially an F for the course).

Exams (3): Exams are composed of multiple choice, fill-in-the-blank and short answer questions. Like the quizzes, students will take exams online and my admonitions about not sharing the exam contents apply too.

Energy Talks (2): These are short oral presentations where the students apply something from current events to the energy industry business concepts we are studying. More detail is available on D2L for these talks.

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 guests.

Energy Situation Analysis Paper and Presentation: This paper and the oral presentation represent an opportunity for you to investigate a question of interest to you that affects the energy industry. Your overall task is to take an interesting (and perhaps controversial) question and answer it in a way that would cause experienced oil and gas professionals to say "I learned a lot." That means you'll need credible information communicated in a cogent manner such that your conclusions are compelling, even to a skeptical audience. More detail is available on D2L for this assignment.

Table 1: Points allocated to each assignment

Element	Points
Exams (3 @ 130 pts each)	390
Quizzes (3 @ 30 pts each)	90
Participation	50
Energy Talks (2 @ 40 pts each)	80
Paper	150
Presentation	75
Total Points	835

Table 2: Grading System

Grade	Points
A	751 or greater
B	668 to 750
C	585 to 667
D	501 to 584
F	Less than 500

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. Petroleum geology
   C. Acquiring mineral rights in the U.S.
2. Drilling and producing oil & gas
   A. Drilling and completing a well
   B. Producing oil & gas
   C. Financial requirements
3. Getting O&G to market with a focus on finances
   A. Midstream and downstream issues
   B. Regulatory agencies and issues
   C. How renewable energy parallels E&P principles

The North Texas Opportunity:

Wichita Falls and the Metroplex have long been the home to numerous O&G businesses. We intend to capitalize on this opportunity by having numerous guest speakers visit the class and by taking field trips to the "oil patch."

Guest Speakers: We'll invite geologists, petroleum "landmen," key E&P personnel and company owners to our classroom. 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, I hope to take two field trips as part of the course, one to a drilling rig and one to an operating lease. 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.** My biggest problems with integrity in this course occur during the energy talks and papers, with students plagiarizing material. Please check with me if you have a question about what I expect. **Cutting and pasting text—even if you modify the wording somewhat--from a source (e.g. an article on the internet) without citing the source and setting off the "pasted text" with "quotation marks" constitutes plagiarism**. My rule of thumb is that if you are using three or more words in a row from a source, it needs to be identified with quotation marks as a direct quote and cited. I use the Turnitin software to check for plagiarism.

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. Students with health-related issues relating to COIVD 19 can also contact DSS to arrange for an adjustment in class attendance expectations.

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

Students must wear facemasks while in the Dillard Building at all times, except when making a class presentation with at least 10' separation from others. We'll maintain at least 6' social distancing at all times in the classroom. If you have concerns about being in a classroom, speak with me to make appropriate arrangements ASAP. If you are feeling ill (no matter how minor), please do not attend the physical classroom session and instead attend class via the Zoom live stream. I plan to live stream every class session, so while you should notify me, if feasible, about any absence in advance as a professional courtesy, the live stream should be available even without advance coordination.

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
8/25	Course Intro and the basics of energy		
9/1	Energy industry history and structure	W Ch 2 (pp. 107-119)	
9/8	Energy Industry—Current Status	W	
9/15	Geology Recap (Dr Meddaugh)	Ch 1 (pp. 9-73)	
9/22	Mineral Rights Leasing	Ch 1 (pp. 75-101)	**VQ 1** Window 9/21 1 pm – 9/22 7 pm
9/24	**Exam 1**		**Exam 1** Window 9/24 5 pm – 9/25 11 pm
9/29	Drilling and Completing a Well (1)	Ch 2 & 3	
10/6	Drilling and Completing a Well (2); Well D&C Costs	W	
10/13	Financial Assessment of a Well (predictive and after the fact)	W	
10/20	Financial Assessment of a Well (predictive and after the fact)	W	
10/27	Funding Options	W	**VQ 2** Window 10/26 1 pm – 10/27 7 pm
10/29	**Exam 2**		**Exam 2** Window 10/29 5 pm – 10/30 11 pm
11/3	Midstream and Downstream	Ch 4.1, 4.2 & 5.2	.
11/10	Regulatory Issues—Past and Future?	W	
11/17	Guest Speakers: E&P Senior Leaders		Video ET due
11/24	Renewables	W	**VQ 3** Window 11/23 1 pm –11/24 7 pm
12/3	Papers and Presentation Videos Due		Submit via D2L by 11 pm
12/10	**Exam 3** (5:45-7:45 pm)		Window: 12/9 2 pm – 12/10 8 pm

W = Additional readings are posted to D2L
VQ = Vocabulary quiz