

MANA 7397 - STRATEGIC MANAGEMENT IN THE OIL & GAS INDUSTRY
FALL 2016
Tuesdays, 6-9pm, MH 112

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COURSE OBJECTIVES

The purpose of this course is to examine global oil and gas strategies through the use of strategic management frameworks. The focus is on how organizations can position themselves as leaders in the dynamic landscape of the oil and gas industry.

The cases and concepts of the course take the total business as the unit of analysis, and the general manager of the business as the key actor. The materials encompass a wide range of geographies, businesses sectors, and issues. They are integrated, nevertheless, through their emphasis on the key general management tasks of:

1. Assessing the performance of a business and forecasting its prospects as it is currently being run.
2. Identifying the important opportunities and challenges facing a business and setting out a course of action for dealing with them.
3. Defining the capabilities essential for the development of a business and acting to build or acquire them.
4. Implementing changes, as necessary, in the way that a business is being run.

In addition, this course is associated with the following Bauer Learning Goals:

1. Communication
2. Cross-Disciplinary Competence
3. Critical Thinking
4. Ethical Reasoning

REQUIRED COURSE MATERIALS

- Required cases and readings are included in this Digital Coursepack, which can be purchased at: <http://cb.hbsp.harvard.edu/cbmp/access/51631248>
- Inkpen, A. C., & Moffett, M. H. (2011). *The Global Oil & Gas Industry: Management, Strategy & Finance*. PennWell Books.

BLACKBOARD LEARN

Blackboard is a password-protected online course management system. Starting on the first day of classes, students can use their PeopleSoft ID, to log on to Blackboard Learn courses by going to <http://www.uh.edu/webct> and clicking the “Blackboard Learn” button.

- Assignment Drop Box: Please pay close attention to instructions and due dates/times. Assignments must be submitted through this drop box. Late papers will not be accepted.
- Grades: Use this tool to access your grades for this class including group case presentations, class contribution, the term papers, and the final course grade.
- Powerpoint files: Case Powerpoint presentations will be uploaded every Tuesday after class.

TENTATIVE COURSE EVALUATION

Class Contribution	35 points
Group Mid-term Report	30 points
Group Final Project	35 points
Total	100 points

POINTS:	GRADE:	POINTS:	GRADE:	POINTS:	GRADE:
93-100	A	83-86	B	73-76	C
90-92	A-	80-82	B-	70-72	C-
87-89	B+	77-79	C+	60-69	D
				below 60	F

Contribution

A unique aspect of the course experience is the sharing of insights and experiences in the classroom, in small teams and in the many interactions that happen between participants. Classroom discussion presents a unique opportunity for you to develop and enhance your confidence and skill in articulating a personal position, reacting "on the spot" to new ideas, and receiving and providing critical feedback from a group of assertive and demanding colleagues. Significant classroom contributions result when you discuss alternatives or decision criteria that assist the class in reaching a decision, ask questions to clarify issues or concepts, probe aspects of a peer's comments for improved understanding, share past experiences and insights on effective and ineffective practices, or generally facilitate the classroom process to arrive at significant conclusions.

It is expected that you will be present and prepared for every class and share your views in the classroom discussion. The **study questions** assigned with each case and included in **APPENDIX 1** are designed to guide and stimulate your analysis and preparation. They are not “assignments” to be handed in. I will feel free to call on any individual at any time. If you must miss class it is your responsibility to (1) advise me of your absence by email, (dvera@uh.edu) and (2) arrange

with your classmates for briefings, to pick-up hand-outs, etc. You should understand that frequent absence will seriously damage your participation grade.

In general I evaluate class contributions in an ascending order from good chip shots, to quite substantial comments, to case cracking contributions. I believe that challenge and debate are important to discovery and understanding, and I appreciate the willingness of individuals to engage in such activities with their classmates and with me. Using air time involves an obligation to actually contribute; comments such as recitations of case facts, bland summaries of prior discussion, and so on, are devoid of implications, i.e., they don't pass the "so-what" test.

<i>Point Value</i>	<i>Category (Frequency)</i>	<i>Components of in-class contribution</i>
3	Outstanding Rare (0-10%)	The comment adds substantial value to the discussion. Demonstrates willingness to take risks in attempting to answer difficult or unpopular questions. Breaks new ground and raises the flow of discussion to a higher level, often by synthesizing material and applying multiple lenses or techniques.
2	Significant Frequent (10-30%)	The comment adds value to the discussion, beyond case facts. There is evidence of analysis rather than just the expression of opinion (although some espousal of opinion is acceptable, even desirable in certain circumstances) Comments are linked to those of others, facilitating the flow of the discussion. Demonstrates knowledge of readings and other relevant course material. Incorporates relevant insights from other courses or current affairs
1	Good Common (50-70%)	The comment advances the flow of the discussion (including responses to questions from the instructor). Demonstrates a clear grasp of case material. Information presented is relevant to the discussion.
-1	Unsatisfactory Rare (0-10%)	Lack of preparation for class discussion; failure to listen. Criticisms are directed at others versus towards their ideas. Defensive behavior (e.g., aggression or withdrawal) is exhibited. Drains energy from class goals.

Occasionally, some students find it difficult to participate effectively in class because of language or other challenges. Please let me know if class participation is a significant concern for you.

Group Mid-term Report (Take-home Case)

The class will be divided into groups of 4-5 students for the Group Project. You will have approximately one week to form your own groups - after that time, I will form the groups. (Note: At any time when you have decided upon group membership, please give me a piece of paper or

email with a list of requested members).

I will assign a case as a take-home assignment. Your group will have 2 weeks to analyze the case and submit one response per group. Your response must respect the following guidelines: **5-6 pages (excluding exhibits etc.), 1 inch margins, Times new roman 12-point font, and double line spacing.**

To analyze the case, the following structure will help push your thinking:

- A. Use the Diamond-E framework to identify all of the pertinent problems/issues that management needs to address.
- B. Perform whatever analysis and evaluation is appropriate.
- C. Propose an action plan and set of recommendations addressing the issues you identified.

Detailed instructions will be included with the take-home case. No collaboration among groups is permitted for the midterm report. **Grading criteria include:** (1) Analysis rigor, (2) Quality, professionalism and clarity of writing and presentation, and (3) Specific, action oriented, internally consistent and common sense recommendations (Note: Do not try to guess my conclusions on the case – there is no one right answer!).

Group Project

The same groups will be used for the Group Project. The objective of the Group Project is to apply the tools of strategic analysis to evaluating the strategy and performance of a real organization in the oil & gas industry and, on the basis of an analysis of the present situation and emerging trends, to begin to chart or recommend a future direction of the enterprise. You are assuming the role of management consultants for this project.

Local or Texas-based businesses, as well as national or global businesses may be selected. They may be large or small, a single corporation or a division or business unit of a larger concern. They may also be government, private or not-for-profit organizations. **Three types** of projects may be selected: (1) Interactive, (2) Literature-based, and (3), Start-Up Business or New Venture Idea.

For the **interactive** project, your group will contact, gain cooperation, meet with, and collect information from managers in the firm and other sources to conduct the analysis. The professor will provide - if needed - a letter of introduction or confirmation to the firm regarding the educational nature of this project.

The **literature-based** project does not require personal contact with the firm and is for groups unable to secure local business interest. The task of the group will be to conduct an analysis of a selected firm from public sources. As with the interactive format, sources may include annual reports, 10K reports, magazine/newspaper articles, press releases, Internet sources, and investment analysts' reports.

Finally, the **Start-up Business or New Venture** concerns an idea for an enterprise which your group would like to explore more fully. Rather than a full-blown Business Plan, the task of the group will be to analyze and present a ***Feasibility Study*** of the idea. The major difference is that a Business Plan will contain a significant section on financial needs and projections, while the Feasibility Study will only provide a cursory review of financial analysis - the major emphasis will be on identifying and matching the market need with a preliminary business plan.

The selected topic from one of three options must be approved by the professor by Week 4. Make your selection as early as possible to lay claim to the organization as duplication in the class will not be allowed.

The **format or content** of the project will vary according to the characteristics and circumstances of the company and its industry sector, and the preferences of the students and the company managers. A suggested general format is attached in **APPENDIX 2**.

The **project output** includes:

1. An oral presentation to the class of a maximum of 20 minutes in which you will outline your findings and recommendations to be followed by 10 minutes of Q&A. A 1-2 page Executive Summary should be prepared and **distributed to each member of the class**. The use of visual aids is recommended and professionalism is assumed. **A brief financial analysis is expected**.
2. A **Summary Report** to the Professor that will include the 1-2 page **Executive Summary** (see above) and **copies of all overhead/PowerPoint slides** used in your presentation. **Note:** this is not a lengthy report.

ASSUMPTIONS AND EXPECTATIONS

You are expected to be fully engaged in the entire learning process. This means devoting time and energy to preparation before class, including learning team meetings, listening to others during class discussions and engaging in class discussions. Most of the case studies we will be working on in this course are undisguised. We will be dealing with real people and the real company. This encourages engagement in the case situations and facilitates follow-up on developments subsequent to the case events. It also creates some potential disadvantages that I would like to ensure we minimize. The process of analyzing, discussing and learning from cases depends in a significant way on discovery - discovering what the real opportunities and problems in the case are as it currently stands, discovering and evaluating the possible ways of dealing with them, and discovering the lessons that can be drawn for continuing use. The value of this process is diminished if we short-circuit it by jumping ahead to find out 'what happened' before we have done our best to understand the case. Similarly, we lose something when someone with special knowledge of the situation does not respect the necessary process of analysis.

Each case requires you to ***go back in time***: therefore, no updating is necessary. Use ***only*** the

material in the case. Unless explicit instructions are received from your instructor to the contrary, your preparation must be limited to the information provided by your instructor, plus your own experience and that of your class peers. Information related to cases that has been obtained from sources other than your instructor is not permitted to be used for class contribution purposes.

Such prohibited information includes, but is not limited to, the following:

- Hand-outs, including follow-on (“B”) cases
- Exam or report feedback (related to a particular case) for other students or provided in other cohorts or years
- Notes, spreadsheets, etc. specific to cases (obtained before the case has been taught) prepared by students in other cohorts or years
- Company information that is not provided in the case (and that is not derived from your own experience)
- Teaching notes

If it is determined that such prohibited information is used in class discussions, such an incident will be deemed to be a violation of the college’s code of professional conduct.

The **readings and supplementary book** are your responsibility. They will not usually be covered in detail during class but will be utilized as they apply to the issues at hand. ‘Lecturettes’ may be used throughout the course to supplement the case discussion.

To assist in class participation and knowing your names, **name cards** will be used for each student. Except for emergency situations, **please turn off all cellular phones.**

Using your **computer** during class for personal activities such as reading/writing email, writing letters, surfing the Web, playing games, etc. is also distracting and counter-productive and violates the BAUER Honor Code.

DEADLINES AND LENGTH LIMITS

Over time, I have come to appreciate the degree to which students want to be treated fairly and equitably when dealing with deadlines and length limits on assignments. I am well aware of the significant frustration associated with scrambling to meet a deadline, or working at crafting a succinct and coherent response to an assignment, only to find that a colleague has received greater latitude in their submission. Since there is ample lead time on the assignment and since it is short in length, I have instituted very significant penalties. Given your busy schedules I expect that you will complete the assignment with sufficient lead time to ensure there are no last minute constraints. The penalties are as follows:

Minor delay (<1 week)	1 letter grade (e.g., from A to a B)
Major delay (1 week or more)	2 letter grades

Assignments that are not received prior to the graded assignment being returned to the class will

receive a grade of zero. Note that failing to submit an assignment will result in a grade of Incomplete for the course and will prevent advancement or completion of the program.

A similar policy is in place for projects that exceed length limits. Minor excesses (10% or less) will normally result in a partial downgrade (e.g., B+ to a B), and significant excesses (more than 10%) in a penalty of one letter grade. I expect that the document will be readable and tightly edited. Small font sizes and verbose analysis are not viewed favorably.

PLAGIARISM AND ACADEMIC HONESTY

Students must write their reports and assignments in their own words. Whenever students take an idea, or a passage from another author, they must acknowledge their debt both by using quotation marks where appropriate and by proper referencing such as footnotes or citations. Plagiarism is a major academic offence. All required papers may be subject to submission for textual similarity review to the commercial plagiarism detection software under license to the University. All assignments submitted will be included as source documents in the Turnitin database for the purpose of detecting plagiarism of papers subsequently submitted to the system.

The UH Academic Honesty Policy is strictly enforced by the C.T. Bauer College of Business. No violations of this policy will be tolerated in this course. A discussion of the policy is included in the UH Student Handbook which can be found at <http://www.uh.edu/dos/hdbk/acad/achonpol.html>. Students are expected to be familiar with this policy.

ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES

The C.T. Bauer College Business would like to help students who have disabilities achieve their highest potential. To this end, in order to receive academic accommodations, students must register with the Center for Students with Disabilities (CSD) (telephone 713-743-5400), and present approved accommodation documentation to their instructors in a timely manner.

INSTRUCTOR EVALUATIONS

The Bauer College of Business has a policy that requires all of its instructors to be evaluated by their students. The results of these evaluations are important to provide feedback to instructors on how their performance can be improved. In addition, these evaluations are carefully considered in promotion, salary adjustment, and other important decisions. We openly encourage students to provide feedback to the instructors and to the Bauer College of Business through the evaluation process.

TENTATIVE COURSE SCHEDULE

DATE	ASSIGNMENTS
	<i>STRATEGY</i>
Week 1 Tue. Aug. 23	Syllabus and Introduction Article: “Strategic Analysis and Action” Article: “Living in the Futures” (On Blackboard)
Week 2 Tue. Aug. 30	Industry Note: “The Global Oil and Gas Industry” Case: Delta Airlines and the trainer refinery <i>Form Groups</i>
Week 3 Tue. Sept. 6	Case: Reliance Industries: An emerging player in global petrochemicals and energy Article: “Going Global: Lessons from late movers” Article: “Strategies that fit emerging markets”
Week 4 Tue. Sept. 13	Case: Kosmos Energy and Ghana (A) <i>Group Project Topic DUE</i>
Week 5 Tue. Sept. 20	Case: Mitchell Energy and the Shale Revolution Article: “Blue Ocean Strategy: From Theory to Practice” (On Blackboard) Article: “Blue Ocean Leadership” (On Blackboard) <i>Group Mid-term Case assigned</i>
	<i>GLOBAL PERSPECTIVE</i>
Week 6 Tue. Sept. 27	Case: Pemex (A): In a Free Fall?
Week 7 Tue. Oct. 4	Case: Petrobras in Ecuador (A) <i>Group Mid-term Case DUE (One person of the group, please upload to BB)</i>
Week 8 Tue. Oct. 11	Case: Statoil's evolving strategy Article: “Exporting the ‘Norwegian Model’: The Effect of Administrative Design on Oil On Oil Sector performance” (On Blackboard)
Week 9 Tue. Oct. 18	Case: Dutch natural gas and the Groningen field: The creation of a new industry
Week 10 Tue. Oct. 25	Case: Gazprom: The evolution of a giant in the global oil and gas industry
Week 11 Tue. Nov. 8	Case 1: Reforming Nigerian National Petroleum Corporation. Case 2: VidaGas: VillageReach - The Mozambican Foundation for Community Development Joint Venture
Week 12 Tue. Nov. 15	Case: Colfax Corporation: Designing A Middle East Oil and Gas Distribution System
Week 13 Tue. Nov. 22	Case: Oil Refining in China
Week 14 Tue. Nov. 29	<i>Group Presentations and Reports DUE (One person of the group, please email me the materials)</i> LAST DAY OF CLASSES
Dec 15	Official closing of semester

APPENDIX 1

STUDY QUESTIONS

The Global Oil and Gas Industry

1. Describe the structure of the oil and gas industry.
2. What is the basis for competitive advantage?
3. What are the main factors that impact the structure and competitive dynamics?
4. Why are many of the largest competitors in the industry vertically integrated?
5. What will this industry look like in five years? In ten years?

Delta airlines and the trainer refinery

1. What drives the basic economics of the airline industry? The refining industry?
2. Are rising fuel costs truly a problem for Delta? Is Delta different from other airlines?
3. Why are fuel costs rising?
4. If the price of jet fuel is rising, why are the Trainer refinery and other refineries on the East Coast closing?
5. How would owning the Trainer Refinery help Delta manage its jet fuel costs in the future?
6. Would you recommend that Delta buy the Trainer Refinery?

Reliance : An emerging player in global petrochemicals and energy

1. What are the sources of competitive advantage for RIL? How have they been built and nurtured historically? Are these competitive advantages sustainable in the medium term?
2. What insights would you draw from the evolution of RI Lin India for the emergence of the new global players from emerging markets? How would these insights help inform your strategy if you were competing against players such as RIL?
3. What are the competitive threats that RIL faces at the end of the case? How might the management of the company address these threats?

Kosmos Energy and Ghana (A)

1. Describe Kosmos's strategy—what are the key measurable objectives?
2. What do the financial investors want?
3. Why did the GNPC block the ExxonMobil deal?
4. Where is Ghana going with its oil developments? Will it become a victim of the oil curse?
5. If you were advising Kosmos, what you recommend for the future: Sell Jubilee? Become a full-fledged E&P company? Sell the company?

Mitchell Energy and the Shale Revolution

1. How would you characterize the oil and gas business in the 1970s when Mitchell Energy was a fledgling company? Would the characterization be different if you were to take the perspective of an independent versus a major?
2. What are the crucial decisions that George Mitchell made fairly early on in establishing Mitchell Energy that might have set the stage for the success he was able to deliver?
3. How did George Mitchell, and later some of his senior staff, help address the four hurdles to

blue ocean thinking (cognitive, motivational, resources, and political)?

4. What lessons can you draw about implementing innovation from the experience of Mitchell Energy and George Mitchell?

PEMEX (A): In a Free Fall?

1. What was wrong with PEMEX?
2. How would you fix it under the current regulatory regime?
3. What are the main reforms PEMEX needs?

PETROBRAS in Ecuador (A)

1. University of Pennsylvania Law Professor David A. Skeel has observed that “ We run roughshod over some contracts and not over others.” When, if ever, is running roughshod over contracts justified?
2. How should Petrobras respond to Ecuador’s unilateral revision of its contracts?
3. In deciding how to respond to Ecuador’s actions, what constituencies is Petrobras obligated to take into account? Should it consider the interest of other constituencies as well? How should it weigh and balance various interests?

Statoil’s Evolving Strategy

1. How did the original Ten Commandments of the Petroleum Directorate shape Statoil strategy?
2. What advantages did Norway and Statoil have in establishing an NOC versus a country like Chad, Nigeria, or Saudi Arabia? Is Statoil different from other NOCs?
3. Why did Statoil go through the period of scandals?
4. Evaluate Statoil performance. How does this performance compare to other NOCS?
5. Why did Statoil expand its activities beyond Norway? Does international growth as a strategic objective make sense?

Dutch Natural gas and the Groningen field: The creation of a new industry

1. When gas was discovered in 1959, it was necessary to develop a new gas market. What are your views on the market development? Was it done well? Could it have been done better?
2. Describe the role of the Dutch government. Was this a good structure for Shell and ExxonMobil?
3. The Groningen field has been producing since 1963. Why has the JV lasted so long?
4. Has Dutch gas been good for the Netherlands?
5. The Groninfield life cycle – has it been well managed?
6. For an integrated oil company like shell or ExxonMobil, what are some key success factors that can be applied to other long term energy development projects?

Gazprom: The evolution of a giant in the global oil and gas industry

1. What are the key resources that have enabled Gazprom to be successful? Are they sustainable? What are its vulnerabilities?
2. Some believe that Gazprom is an instrument of Russian foreign policy implementation, but others disagree. How would you characterize the company, and why?
3. Evaluate Gazprom’s international moves. How would you rate the company’s strategic

position in its core areas? Where has it failed?

4. If you were looking at Gazprom as an investment opportunity in late 2008, what conclusions would you draw?

Reforming Nigerian National Petroleum Corporation

1. In brief, what is oil's role in Nigeria? What is the current state of the industry?
2. What role do Nigerian presidents and leadership—and the military—play in the conduct of NNPC's business?
3. Do all countries fall victim to the course of oil? If not, why not?
4. Are oil and corruption inevitably linked? Or is Nigeria inherently more corrupt for some reason?
5. Does NNPC really need fixing? What evidence or metrics could be used to evaluate NNPC's performance to date?
6. What are some possible alternatives that President Buhari could take to reform NNPC?
7. As an advisor to President Buhari, what would you recommend as the first and second steps in the reformation of NNPC?

VidaGas: VillageReach - The Mozambican Foundation for Community Development Joint Venture

1. What are the factors that have contributed to the seeming success of the Cabo Delgado project? Can the approach be replicated in other locations?
2. What factors have contributed to VidaGas' development? Why has it seemed to succeed where other distributors have been unwilling and unable to?
3. Given its current situation (i.e. without a significant cash injection), how far is VidaGas from being profitable? Is VidaGas really a feasible business?
4. Should Village Reach sell VidaGas? For how much? Under what conditions? To whom?

Colfax Corporation: Designing a Middle East Oil and Gas Distribution System

1. Put yourself in Joe Niemann's shoes. What are you going to do?
2. How are you going to get important people to take the risks you need them to take and, in some cases, to disrupt their own lives with increased long-distance travel or even reassignment to the Middle East?

Oil refining in China

1. Why was Sinopec's refining margin so low compared to world averages?
2. How has China's refining industry reacted to price controls? Do the domestic players anticipate a significant change anytime soon?
3. What would happen if the government removed all price controls?
4. There are no express general restrictions for foreign investment in China, so why are so few overseas companies participating? Why did Total make a direct refinery investment and why did it partner with CNPC and Sinochem?

APPENDIX 2

Suggested Analysis Format for the Group Project

ANALYSIS FORMAT

1. **EXECUTIVE SUMMARY:** A brief (1-2 pages) overview of the group's analysis, key strategic issues, and recommendations. This is the **handout** you will give out to each student in your presentation.
2. **MISSION/GOALS:** Evaluation of the firm's stated (if stated) mission and goals. If none exist, develop them in a ***very brief and concise*** manner.
3. **EXTERNAL ANALYSIS:** Analysis and evaluation of the firm's major external environmental components. This includes the General Environment, Industry Analysis (5 Forces Model), and Competitor Analysis. Section should end with a ***clear identification of key opportunities and threats***.
4. **INTERNAL ANALYSIS:** Analysis and evaluation of the firm's major internal resources, capabilities, and core competencies. A financial analysis is expected. You should end this section with a ***clear identification of key strengths and weaknesses***.
5. **COMPETITIVE ADVANTAGE:** Brief statement which highlights the firm's ***Competitive Advantage*** or ***Sustainable Competitive Advantage*** (if any). This will serve as the lead into the next section.
6. **STRATEGIC ALTERNATIVES:** Flowing directly from Step 5, this section should identify and evaluate the ***major*** strategic alternatives or options available to the firm currently. A ***Matching Analysis*** is required, but in ***concise form***.

INSTRUCTIONS

1. Remember that you are acting as management consultants to the firm to analyze the situation.
2. The report should be professionally done. The report will be submitted with the presentation.
3. The presentation should be ***no more*** than 20 minutes in length (excluding Q&A session). The format need not be totally followed, though the key points should be made at some time.
4. Creativity is welcomed and encouraged. Use of PowerPoint and other presentation aids is also encouraged.
5. Every member of the team needs to present. The presentation is informal.
6. ***Remember:*** This assignment does NOT require a lengthy report to be submitted by the team. Your project submission will include two elements: (1) An Executive Summary, and (2) copies of all slides, tables, exhibits and so on.