

PEGN 481 – PETROLEUM SEMINAR

FINAL ASSIGNMENT!

Read ALL of this assignment and be sure you understand what is being asked. In addition, read through this and start working early so you can ask questions and address issues without unnecessary stress that may be caused by last minute questions and misunderstandings. I want for you to be successful on this assignment, so please do not hesitate to ask questions.

In lieu of a final exam, this will be your "final." Your goal is to show me how well you have mastered the outcomes of this course by providing thoughtful answers to five prompts. Course outcomes are statements that list what you should be able to do by the end of the semester. These are the criteria that guided how each of your assignments were graded. For this class, the outcomes are listed in the syllabus. To paraphrase, here is what they are:

1. Be able to write and speak effectively to various audiences.
2. Discuss the different perspectives that different groups have, and determine reasons why they may have those perceptions. In addition, consider opposition views and be able to justify how you know what they perceive and defend the validity of any conclusions you make by supporting them with logic and additional resources.
3. Be able to evaluate issues, synthesize various considerations of these issues, and articulate the context of the issues in a way that provides depth, provokes thought, and adds to the audience's understanding. Multiple aspects of these issues need to be considered, including (but not limited to): technical, economic, environmental, corporate, social, political, health, safety, ethics, manufacturability, and sustainability. Also, be able to justify and defend your conclusions by supporting them with logic and additional resources.
4.
 - a) Begin to shift your focus toward operating as a professional, rather than a student. Exhibit professionalism through being engaged in the course (attendance and participation), treating classmates and class staff as you would like to be treated, and by taking the initiative to complete course tasks (this includes asking questions if you are unsure about something).
 - b) To start building a "toolbox" of professional project, team, and time management techniques, practice using tools and techniques such as schedules, Gantt charts, task lists, resource repositories, agendas, and minutes.
5.
 - a) Use multiple credible and/or appropriate resource types to research topics, analyze situations, and synthesize information. Cite these resources appropriately.
 - b) Begin practicing reflection about and evaluation of your work, project, team, and performance to determine how to improve and what you need to learn. This will be essential for continuously improving once you are in the working world.

This assignment is your opportunity to provide me with evidence and enough information to show me the extent to which you have achieved these outcomes. If you don't think your grades to this point in the semester reflect your abilities or how you are really performing in this course, this is your chance to convince me. With this in mind, using your best writing skills, organize your thoughts and answer the following prompts. Please work on this assignment **by yourself** in order to show me your individual achievement for these outcomes.

Part 1. Thinking of what you have learned about effective presentations, create a list of criteria that a presentation needs to meet in order to be considered as stellar (This should **NOT** be a copy and paste of the rubrics from this course. I am interested in **YOUR** ideas). Provide a list of these criteria that includes brief explanations of what needs to be done to meet the criteria. Aim to have 5-8 criteria.

- This prompt focuses on Outcome 1. Show me that you know what makes a presentation effective. Your criteria should cover how slides/visuals are designed, how a topic is presented, and how the presenter acts and delivers the talk.

Part 2. Use your criteria from #1. Scour the internet for videos of presentations and find an example of an excellent presentation. (I doubt that you will find a perfect one out there, but strive to find one that is really good.) After you have watched the presentation, use your criteria to write a critique of the presentation. There is no length requirement, however, it will likely be at least 1 page long in order to fully explain your ratings. For these critiques, discuss why you feel the presentation was an excellent one. Indicate how the speaker performed for each of your criteria. Explain why the speaker earned the ratings you gave them, what they did well, and what they could do to improve. **IMPORTANT:** You need to make this a coherent document with "flow" and not a bullet list of how the speaker performed in each category. Use complete sentences, paragraphs, and design your critiques so that they are easy to read by using white space, headings, sections, images, or other components.

- **This prompt focuses on Outcome 1 & 3. Show me that you can write effectively, and evaluate a speech according to your criteria. Your evaluation should synthesize your criteria in the context of the speech, critically analyze the speaker's performance, and articulate your analysis in a way that provides depth, provokes thought, and adds to the audience's understanding of your criteria.**

Part 3. Read through the attached document about drilling in the Atlantic. Thinking about what you know about writing well, briefly discuss what the authors did well, and what they could improve upon. I suggest you refer to rubrics and class materials that have been used this semester to refresh your memory on good writing practices. This does **NOT** need to be a coherent document. Feel free to use a table, bullet lists, or any other format that you feel will effectively communicate your thoughts concisely.

- **This prompt focuses on Outcomes 1, 2, 3 & 5. Show me that you have ability in these outcomes by critically analyzing written work.**
- **If you need help deciding what to evaluate, feel free to refer to the requirements laid out in the course rubrics this semester. You do not need to comment on every item on these rubrics. Simply discuss what is done well and what needs improvement.**
- **Show that you can communicate the key aspects of your analysis in a concise and effective manner.**

Part 4. I am sure you noticed that the document on drilling in the Atlantic is not complete. It is your job to write the conclusion for this document. Using the information presented, answer the question, “Was the decision to remove offshore Atlantic leases justified?”. What are your thoughts and conclusions? Justify your thoughts with logic, and with information from the document. Although not required, you are free to read through the sources in the reference list and/or do your own research to find your justification for your thoughts. Strive to provide your answer to this prompt in 1-3 paragraphs. That’s not very long... This means that you need to summarize your thoughts well, which may require that you write multiple drafts before turning it in.

- **This prompt focuses on Outcomes 1, 2, & 3. Show me that you can clearly communicate your thoughts to me about this issue. To do this, you will need to synthesize the views for and against this issue in your mind. Use this synthesis to evaluate drilling in the Atlantic and come to your own conclusion. It is the conclusion that you will be writing about. There is no need to write your synthesis – it was already done by the other authors. Be sure to discuss multiple aspects of the issue when making your case – such as technical, economic, environmental, social, political, safety, ethical, etc.**
- **In addition, think about what those opposed to your conclusion may say and address this in your discussion.**
- **Justify your thoughts with logic, information from the information presented in the document, and if you desire, any other information you find from further research)**

Part 5. Follow the link below to complete the team, group, project, and course reflection. It includes the same questions you answered earlier in the semester as well as other questions regarding your team’s project management, and a self-evaluation. I expect it will take you some time to complete, so be sure to set aside around an hour to provide thorough answers. Here is the link: <https://goo.gl/forms/SmL8qM9nLGXpeCoT2>

- **This prompt focuses on Outcomes 4 & 5. Strive for completeness and honesty. You are graded on the depth and sincerity of your responses – not on any ratings that you are giving to yourself, or how much praise you give to your group. The ratings are purely to help you reflect. Please do not give all your team members the exact same ratings. I am 100% certain that everyone contributed in their own ways.)**

Estimated Total Completion Hours (All Parts): 3-5 hours

Withdrawal of the Atlantic from the 2017-2022 Offshore Leasing Plan

Reversing the Decision to Allow for Atlantic Expansion

Congress banned drilling in most offshore waters, including the Atlantic, in 1982, citing environmental concerns. In October 2008, Congress lifted the ban to appease the public decrying high gasoline prices (Gimbel, 2008). In March of 2010, the Obama administration introduced an energy strategy to end the decades-old Atlantic moratorium. However, this was quickly abandoned after the incident with Macondo (CNN, 2010). In January 2015, the Obama administration's tentative 5 year plan for 2017 to 2022 included reduced leasing in the arctic but included one lease sale for the Chukchi Sea, Cook Inlet, and Beaufort sea in Alaska, 10 sales in the Gulf of Mexico, and one sale of new land in the Atlantic (Showstack, 2016). In March 2016 the administration withdrew the Atlantic area from the 2017-2022 five year plan. The map below shows the Mid-Atlantic leasing area considered and then withdrawn:



(Bloomberg, 2016)

The reasons cited by Interior Secretary Sally Jewell for the withdrawal of the Atlantic were “significant potential conflicts with other ocean uses such as Department of Defense and commercial interests, current market dynamics, limited infrastructure, and opposition of many coastal communities” (Hayward, 2016; Fears, 2016). This decision brought intense frustration from the oil and gas industry and drew much praise from environmental groups and coastal cities.

Production History and Future Potential

Before the 1980s, fifty-one exploratory wells drilled in the Atlantic Ocean off the coast of the United States. Even though all of these wells were either dry holes, or had uneconomic production and were

consequently plugged and abandoned, the area is still believed to have potential (IHS, 2010). To date there has been no oil or gas produced commercially from the U.S. Atlantic continental shelf. Prior to the ban on leasing and exploration being in place gas discoveries off the coast of New Jersey by Tenneco, Texaco, and Exxon were made, but due to the pricing climate of the 1980's the reserves were judged to be uneconomic. A study by the Bureau of Ocean Energy Management conducted in 2012 estimated that 3.30 billion barrels of oil and 31.28 trillion cubic feet of gas are currently undiscovered and technically recoverable in Atlantic federal waters. This estimate represents 4% of the total estimated oil resources and 8% of the total estimated gas resources estimated to still be in place in U.S. federal waters (Wikipedia, 2016). The current ban prohibits lease sales until at least 2022 and further development beyond that would be slow as the East Coast lacks necessary infrastructure for immediate development. Seismic exploration continues over the region despite environmental concerns.

Arguments For Atlantic leasing

There are definite arguments for opening up offshore operations on the Atlantic coast. The first of these is gaining energy independence. The United States is consistently one of the highest consumers of oil and gas. Because of this, in order to be energy independent we must be able to produce enough oil and natural gas to sustain our current level of use (and possibly increase it) (Galluci, 2016). Furthermore, "Having a wide range of geographical sources for energy stabilizes the market" (Galluci, 2016). If there were to be issues in one area, it would be very beneficial to have steady production coming from another location. Reserves in this area are still unknown because there has not been much exploration in the area, however when looking at other Atlantic reservoirs, some believe that there could be as much as 90 billion barrels of oil and 327 trillion cubic feet of natural gas (Sirota & Mindock, 2016). This could potentially be a large reservoir that would be able to provide energy for a long time.

Opening up the Atlantic to offshore operations would also help the American economy by boosting jobs (Sirota & Mindock, 2016). Not only would there be more jobs directly related to offshore operations, but the infrastructure for offloading, transporting, and refining in the southeast would need to be improved (Galluci, 2016). This could provide hundreds of thousands of jobs (Davenport, 2016).

Arguments Against Atlantic Leasing

There are a few different arguments made against opening up leasing in the Atlantic. The first is that there are many different hazards when drilling offshore. First, you are often dealing with higher pressures because you have an entire column of water that you must account for. Second, you often do not have direct access to the wellhead. Furthermore, weather conditions can cause severe damage to drilling operations.

Apart from drilling hazards, Atlantic coast locals in most seaboard cities worry about how offshore operations will affect their communities and industries. After the Macondo blowout, locals are very concerned about the potential risks related to a blowout or spill in the Atlantic. A spill in this area would have far reaching effects. First, it would affect marine life. This area is host to many animals including turtles, dolphins, whales, and many fish. (Scales, 2014). Many fish, such as tuna, wahoo, swordfish, and billfish also migrate through this area, so large scale operations may have a lasting global effect on these fish populations (Scales, 2014). Early exploration techniques such as seismic would affect marine life, as some are "especially sensitive to the intense sound impulses used to prospect for energy resources beneath the seafloor" (Scales, 2014). These concerns for marine life also effect local industries. One large industry in the area is commercial fishing. If marine life was disrupted, there could be huge negative impacts on the fishing industry (Dlouhy, 2016).

There are other concerns apart from those pertaining to marine life. Firstly, one of the main industries in the area is tourism. Tourism is a billion-dollar industry, and many locals are nervous about putting that at risk (Davenport, 2016). If a large scale spill was to occur, it could do a lot of damage to that industry. However, it would not merely be the Atlantic coast that was affected. The gulf stream current runs along the Atlantic coast. This current sends water from near the Atlantic coast of Florida straight up to Europe. Thus, a spill could quickly spread internationally (Black Pest - Eurotrip, 2010).

Furthermore, there is a concern for how offshore operations in this area will affect the national defense. The Navy is based in Norfolk, Virginia, and there are other ports along the coast. If too many

wells are being drilled, it could affect the ability to quickly and effectively dispatch ships (Galluci, 2016).

Finally, one of the last major concerns involves the potential for climate change due to further drilling. Many people believe that opening up drilling the Atlantic is directly in opposition to the climate plan that was signed in Paris in 2016. This deal stated that we would work to lower carbon emissions so that there is no more than a 2-degree C increase in temperature due to the global warming effect. Many people believe that opening up a new area would be a step in the wrong direction towards meeting the goals set from this conference (Galluci, 2016). Over 100 towns and cities in the area of the proposed leasing area passed resolutions opposing oil and gas activities. Opposition in the affected regions appears to be primarily regional. Coastal communities generally oppose oil and gas activities while the inland populations of the affected states are much less opposed to leasing (Davenport, 2016).

Was the Decision to Remove Offshore Atlantic Leases Justified?

You tell me. And tell me why. Was this simply a decision made to frustrate the industry by removing acreage from leasing? Was it a well-considered decision that came to the correct conclusion? What thoughts do you have? Justify your thoughts with logic, references from the above text, and any other information you may find if you do further research.

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