

ENGY 1250 Intro to Oil and Gas Industry section name section credit hours Credits Syllabus

Course Information

Meeting times and location: section meeting_times section location

Catalog description: Students will study producing natural gas and oil, from how gas and oil are formed and the geologic formations in which they are found, exploring, drilling and completing the well location to the sale of the product to include: typical geology, how gas and oil are found, the drilling technique, the wellhead, casing and tubing, completion of the well and the surface equipment required with an emphasis on natural gas compression.

Prerequisites: course prereqs

Terms offered: All Semesters

Section-specific Course Description:

Course Level Objectives

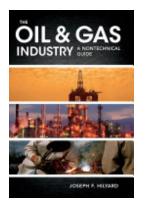
Upon successful completion of the course, the student will be able to...

- 1. Explain how hydrocarbons and petroleum are formed and the geologic formations they are found in and explain the difference between porosity and permeability of a formation.
- 2. Demonstrate their understanding of the composition of crude oil and the different unconventional sources for crude oil and the products created from crude oil.
- 3. Demonstrate their understanding of the formation of natural gas and the different formations it is found and recent trends in the industry.
- 4. Demonstrate their understanding of some of the processes used to explore for oil and gas.
- 5. Explain the need for casing and tubing in a well and identify their functions for oil and gas production.

- 6. Explain the function and installation of the wellhead for oil and gas production and recognize the parts and functions of a wellhead.
- 7. Identify the differences in onshore and offshore installations
- 8. Identify and explain the function of the equipment on a typical well location and how it is used to manage production and explain the use of artificial lift methods to manage production.
- 9. Explain how oil is transported and stored, how natural gas is transported, measured and distributed and the role of compression in the process and how LNG (Liquefied Natural Gas) is produced and transported.
- 10. Demonstrate the terminology used and some of the processes and products derived from oil and natural gas.

11. Explain the structure, how the trading is done and the current trends and challenges of the oil and gas industry.

Required Texts and/or Materials



The Oil & Gas Industry A Nontechnical Guide 9781593702540 Ioseph Hilvard

Joseph Hilyard PennWell Books 2012-01-01

Required Technology and Software

- Canvas
- Chrome, Safari, or Firefox

Technical Support

Technical support is available through the San Juan College Help Desk 24/7/365. The help desk can be reached at 505-566-3266 or by creating a ticket at <u>San Juan College</u> <u>Help Desk</u>.

For tickets and password reset: San Juan College Help Desk

For Canvas support information: Canvas Support

Accessibility/Privacy Policies for all Technology Tools Used

Accessibility/Privacy Policies for all Technology Tools Used

Course Requirements

Students will do the following activities:

- Complete the SJC Academic Honesty Rules assignment. (The link to this rule can be found below under College Policies, Academic Honesty Rules).
- Set up and activate San Juan College E-Mail Account.

COVID Safe Practices for Being on Campus

Masks / cloth face coverings must be worn while on campus in accordance with the New Mexico public health order. If you feel that you cannot wear a mask due to health complications, please contact Disabilities Services:

disabilityservices@sanjuancollege.edu or call (505) 566-3271. Hand sanitizer stations are at all building entrances, please "wash in, wash out"--clean your hands when you enter and before you leave. Classrooms and labs have been arranged to allow for social distancing; please respect your classmates and instructors by staying 6 feet away from everyone. You will be expected to disinfect your table or area prior to class and after class, cleaning products will be provided for this purpose. Check with your instructor for specific policies for their course. Please do not congregate in hallways or common areas, instead utilize our beautiful outside spaces and weather to visit with your friends and colleagues from a safe distance.

If you have been in contact with anyone who has tested positive for COVID-19, has symptoms, or is waiting on test results, contact your instructor and DO NOT come to class. If you have tested positive, have symptoms or are waiting on test results, contact your instructor and DO NOT come to class. Your health care provider or the assigned contact tracer will let you know when it is safe for you to be around others.

Student Support

Student Services and Support

The Student Support webpage provides information on counseling, tutoring, technical support, and many other support services available to San Juan College students.

Student Support

Academic Support

Academic Support webpage provides information on academic advising, the library, Testing Center, and the honors program.

Academic Support

Participation and Attendance Policy

This course is self-paced and does not require an instructor's permission to submit assignments. Students have 8 weeks to complete all assignments and take the final exam. There will be 1-2 lessons per week that will be available until Sunday at 11:59 PM each week except for the last week of class and the class will end on Friday at 11:59 PM. Students must complete each lesson in that week long session in order to get credit for that lesson(s). There are no make-up provisions for any reason excepting a failure of the online system that the course is presented in. (Extraordinary circumstances may warrant extending due dates only with prior notice). Attendance will be assessed by how many times per week a student logs into the class. 2-3 times per week will constitute 100% attendance. All other frequencies will be assessed by the ability to meet deadlines and the student's knowledge of announcements and correspondence sent during the week. Students who fail to log in the 1st week of class will be automatically dropped from the class. Students who do not complete assignments and quizzes on an ongoing basis will also be dropped for non- participation.

Other Classroom Policies and Expectations

Students who have any issues with course content or grades issued to them should first attempt to resolve any issues with the course instructor. San Juan College does have a formal grade appeal process. If a student wishes to challenge a grade issued to them, they should first contact the course instructor for a copy of the appropriate forms.

Canvas Participation and Expectations

Canvas will document the date, time and how long a student spends on each lesson and assignment. As per the attendance policy, it is expected that a student log in 2-3 times a week.

Instructor Response Time

The instructor will log in to the course 2-3 times daily except for weekends. Usually log in and grading will be once in the AM and 1-2 times in the PM. Any correspondence from the student to the instructor will be answered within 1 hour except for weekends. The instructor will log in each day and do grading and answering correspondence 1 time per day on the weekends.

Course Time Commitment

The course is an introductory course so the time spent on each lesson will vary with the student's familiarity with the material. The expectation is that the student will spend 2-4 hours per week reviewing the material and completing the assignments and quizzes. It is expected that a student will spend an additional 2-4 hours doing research for assignments and subjects.

Grading

To determine final grades....

| Category | Weight |
|-------------|--------|
| Quizzes | 25 |
| Exams | 25 |
| Homework | 20 |
| Assignments | 15 |
| Attendance | 15 |

Key Dates to Remember

Full Academic Calendar

Course Schedule

Module 1 01/19/2021 to 01/24/2021

Module 2 01/25/2021 to 01/31/2021

Module 3 02/01/2021 to 02/07/2021

Module 4 02/08/2021 to 02/14/2021

Module 5 02/15/2021 to 02/21/2021

Module 6 02/22/2021 to 02/28/2021

Module 7 03/01/2021 to 03/07/2021

Module 8 03/08/2021 to 03/12/2021

College Policies

The following information also applies to your work in this class. If you have special needs for campus emergency situations, please inform me immediately.

1. Academic Accommodations - American with Disabilities Act (ADA)

If you believe you need academic accommodations due to physical or learning disabilities, you are encouraged to inform them as soon as possible. The coordinator can work with you in verifying your disabilities and developing accommodation strategies. Please go to <u>Disability Services Office</u>, click the button for "Request for Services" and complete all the steps.

You can also contact the college's disability coordinator in the Advising/Counseling Center at 566-3271 or disabilityservices@sanjuancollege.edu. More information is available on the website listed above.

2. The Family Educational Rights and Privacy Act (FERPA)

Your personal information and grade are confidential. Aside from routine reporting to the college required for this course, I will not share such information with anyone unless I have your permission.

3. Academic Honesty Rules

San Juan College expects all students to adhere to the <u>Academic Honesty Rules</u> as posted online. These are the official guidelines for all classes at San Juan College (July 2006).

4. Student Conduct Statement

College is preparation for professional opportunities, and professional conduct is expected in courses, including online classes, as well as any written communications, and interactions with members of the college community. As part of our learning community, students are expected to interact and communicate in a mature, respectful, thoughtful, and supportive manner. Students who demonstrate disrespectful, hostile, belittling, bullying or other disruptive behavior will be subject to potential consequences and possible dismissal from the college. The college will take appropriate action when students demonstrate threatening behavior (to others or self). Students should refer to the Code of Conduct in the Student Handbook for additional information.

5. Student Safety

Keeping students safe is a priority, and part of that is ensuring that we have the ability to communicate emergency messages – whether for school closures due to weather or for more or urgent situations. Rave is San Juan College's emergency messaging system. Through your SJC student email, you will automatically receive email messages, however, it is also vital that you receive text messages. In order to receive the messages, you must register in a simple process with <u>Rave</u>. When registering, please make sure that your mobile status is "confirmed."

The Department of Public Safety is available 24 hours per day. In an emergency, they can be accessed by calling 215-3091 or 566-3333.

In the event of an emergency, a Rave message will be sent, and depending on the situation, you will be instructed to do one of the following:

- Evacuate the building
- Shelter in place (Campus doors are locked, and operations continue as normal. During this situation, no one other than law enforcement is allowed in or out of the campus.)
- Lockdown (Campus doors are locked. All operations cease, and you should take cover in your immediate area. No one other than law enforcement is allowed in or out of the campus.

6. Non-Discrimination, Sexual Harassment, and Retaliation.

San Juan College does not discriminate on the basis of race, color, religion, sex, sexual orientation, gender identity, national origin, disability, age, genetic, veteran's status, or on the basis of any other category protected under federal, state and local laws. If you have experienced sexual harassment, sexual assault, or any other form of protected class discrimination, we encourage you to make a report. If you report to a faculty member, she/he/they are obligated by policy to share knowledge, notice, and/or reports of harassment, discrimination, and/or retaliation with the Title IX Coordinator. These disclosures include but are not limited to reports of sexual assault, dating/domestic violence, and stalking. You may also make a confidential report to a SJC Counselor. Please refer to San Juan College's <u>Title IX</u> site for further details.

San Juan College's Title IX Coordinator is Stacey Allen, Assistant Director of Human Resources/Equity, Diversity, and Inclusion Officer. The office is located at the Educational Services Center Building, 2nd Floor, Human Resources, Room 4243 at (505) 566-3515 or <u>allens@sanjuancollege.edu</u>.

7. Drop for Non-Attendance and/or Non-Participation

Class Attendance and Participation Expectation:

<u>Face-to-Face</u> -- Students are expected to attend and participate in class regularly. Any student missing more than 10% of consecutive class time, (For example, in a regular 15-week class that meets twice a week, this equates to the student missing 3 consecutive classes) without consultation with the instructor may be considered as having abandoned the course.

<u>On-line</u> -- Students are expected to participate regularly and submit all course assignments, based on the course guide definition. A student who does not submit any assignments during a consecutive 10% of the course (1.5 weeks of a 15-week semester) without consulting the instructor, may be considered as having abandoned the course. Logging in does not meet the attendance standard.

<u>Competency-Based Education Classes</u> -- Students are expected to have regular and substantive interactions with their instructor and to actively work on course content. A student who has not submitted coursework, nor had substantive interactions with the instructor over a consecutive 10% of the term, without the instructor's prior approval, will be considered to have abandoned the competency progression. Last date of attendance will be recorded as the last date that coursework was submitted or that the student met with the instructor. For on-line learners, logging in does not meet the attendance standard.

8. Failure to Meet Class Participation Expectation:

Students who fail to meet participation expectations will have their last date of attendance recorded. This date will be used to recalculate any financial aid received/veteran's benefits received, and the student may be required to repay the institution/government. If the student does not drop the course, an 'X' grade will be recorded. An 'X' grade impacts the grade point average the same as an 'F'.

9. Grading Policies

Incomplete: Incomplete Grade Assignment (Incomplete Grades Information)

The grade of I (Incomplete) is given for passing work that could not be completed during the semester because of circumstances beyond the student's control.

Ordinarily, the assignment of an I is given by the course instructor at the time final grades are due

In no case is an I grade to be used to avoid assignment of D or F grades for marginal or failing work or to require a student to enroll in the class the next semester because work was not completed on time. Circumstances warranting the issuance of an I grade must be beyond the student's control and must be documented on the appropriate form prior to approval.

I grades can be removed only during the subsequent 16 weeks from the end of term, or within the time limit set by the instructor. Removal of an I is accomplished by completing the work in a manner acceptable to the instructor. Re-enrollment in the course under the repeat option does not remove the prior grade of I. Students should not re-enroll for the course. An I not made up within 16 weeks or within the time limit set by the instructor will change to an F grade thereafter and cannot be changed by work completion.

10. Grade Appeals

The policy for grade appeals is in the Academic Catalog.(Grade Appeal Policy)

Student Handbook

The Student Handbook provides information on Student support, student organizations, and San Juan College policies.

Student Handbook

Program Handbook

There is no separate handbook for this course.