Instructor: H. Ilkin Bilgesu
Office: MER 325A
Office Hours: Open door or by appointment

Course Format and Credit Hours: 3 hour lecture (3 credits)

Class Schedule: T Th 2:00 p.m. - 3:15 p.m.

Prerequisites: PNGE 310

Course Objectives: To acquaint the students with the advances and new techniques, equipment, and engineering design calculations used in the oil and natural gas well drilling operations.

Examination Schedule: One Mid-Term and Final (optional)

Grading Policy: 
- Homework and Assignments 30%
- Projects 40%
- Exams 30%

The grades for late homework and project will be deducted by 20 points for the first day and 10 points for each additional calendar day.

Grades:
- 90 and above A
- 80-89 B
- 70-79 C
- 60-69 D
- 59 and below F

Attendance: Students are expected to attend all scheduled classes.


References:
18. Journals:
   (a) SPE Journal - Drilling & Completion (SPEDC)
   (b) Petroleum Engineer International - Hart=s E&P
   (c) Offshore Engineer
   (d) World Oil
Tentative Course Outline

1. Introduction
2. Tubular Design
3. Drilling Optimization Methods
4. Kick Removal
5. Rig Hydraulics
6. Directional Drilling
7. Horizontal Drilling
8. Bottomhole Assemblies
9. Air Drilling
10. Coiled Tubing Drilling
11. Logging While Drilling (LWD)
12. Fishing

All homework and other course related materials will be posted at the web page for this course. You will be using your campus logon and password to access the available documents related to this course. If necessary change your password after you logon and if you have difficulty to connect to this site let please let me know immediately.

Additional Notes: All assignments, reports and projects must be prepared using word processors, data bases, spreadsheets, and graphics programs whenever applicable. They should contain a cover page with information about the course number and title, department and university affiliation, the name of person preparing the assignment, date submitted, assignment number and a descriptive heading for the work performed. All documents relevant to the assignments will be uploaded to the course webpage on eCampus before the due date and time. If necessary upload other documents related to the assignment such as spreadsheets and programs.
UNIVERSITY/COLLEGE POLICIES:

IMPORTANT: Where a conflict arises between the Policies and Expectations of this course with those of the University, the University Policies will supersede these course level practices.

By enrolling in this course you agree to the following University guidelines as outlined in: http://www.Wvu.edu/~socjust/

Inclusivity Statement:
The West Virginia University community is committed to creating and fostering a positive learning and working environment based on open communication, mutual respect, and inclusion. If you are a person with a disability and anticipate needing any type of accommodation in order to participate in this class, please advise me and make appropriate arrangements with the Office of Accessibility Services (https://accessibilityservices.wvu.edu). For more information on West Virginia University's Diversity, Equity, and Inclusion initiatives, please see http://diversity.wvu.edu

Academic Integrity Statement:
The integrity of the classes offered by any academic institution solidifies the foundation of its mission and cannot be sacrificed to expediency, ignorance, or blatant fraud. Therefore, I will enforce rigorous standards of academic integrity in all aspects and assignments of this course. For the detailed policy of West Virginia University regarding the definitions of acts considered to fall under academic dishonesty and possible ensuing sanctions, please see the West Virginia University Academic Catalog at http://catalog.wvu.edu/undergraduate/coursecredittermsclassification/#academicintegritytext. Should you have any questions about possibly improper research citations or references, or any other activity that may be interpreted as an attempt at academic dishonesty, please see me before the assignment is due to discuss the matter.

Emergencies:
In the case of an emergency such as fire alarm, please evacuate the building and gather at least 100 feet away from the building. DO NOT return to the building until the emergency is over and it is cleared by the fire marshal or police.

Adverse Weather:
In the event of inclement or threatening weather, everyone should use his or her best judgment regarding travel to and from campus. Safety should be the main concern. If you cannot get to class because of adverse weather conditions, you should contact me as soon as possible. Similarly, if I am unable to reach our class location, I will notify you of any cancellation or change as soon as possible (by one hour before class starts), using (MIX/eCampus message) to prevent you from embarking on any unnecessary travel. If you cannot get to class because of weather conditions, I will make allowances relative to required attendance policies, as well as any scheduled tests, quizzes, or other assessments.

Sale of Course Materials:
All course materials, including lectures, class notes, quizzes, exams, handouts, presentations, and other materials provided to students for this course are protected intellectual property. As such, the unauthorized purchase or sale of these materials may result in disciplinary sanctions under the Campus Student Code.