

PNGE 432 PETROLEUM RESERVOIR ENGINEERING LABORATORY

Instructor: Dr. Ali Takbiri, 345B MRB

Semester: Fall 2014

Office Hours: Open door or by appointment (Ph: 304-293-3973)

Course Objectives: To acquaint the students with the techniques and standard procedures used in the evaluation of formations encountered in oil and gas reservoirs.

Prerequisite: PNGE 333 Elements of Petroleum Reservoir Engineering or concurrent registration.

Examination Schedule: Quiz and Homework - one Final Test.

Grading Policy:

Laboratory reports	65%
Tests and quizzes	35%

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 laboratories and participate in the experiments.

Textbook : Reservoir Engineering Laboratory Manual by Petroleum and Natural Gas Engineering, West Virginia University. (Will be posted at WVU site for this course.)

Tentative Course Outline:

- Introduction to the laboratory and safety training
- Core Preparation and Porosity Estimation.
- Porosity determination using Helium porosimeter.
- Permeability measurement using gas.
- Porosity determination using saturation method.
- Resistivity measurement of plug size cores.
- Desaturation capillary pressure measurements.
- Capillary pressure measurement with mercury injection.
- Permeability determination using liquids.
- Liquid-liquid interfacial tension measurement.

Social Justice Statement:

“West Virginia University is committed to social justice. I concur with that commitment and expect to maintain a positive learning environment based upon open communication, mutual respect, and nondiscrimination. Our University does not discriminate on the basis of race, sex, age, disability, veteran status, religion, sexual orientation, color or national origin. Any suggestions as to how to further such a positive and open environment in this class will be appreciated and given serious consideration.

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 arrangement with Disability Services (293-6700).”

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 Student Conduct Code at

<http://studentlife.wvu.edu/studentconductcode.html>. 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.