Tentative Schedule
Directed Studies on Petroleum Exploration Techniques

Course Information

Instructor: Richard Langford   **Office Hours:**
Geology 401 B   747-5968   **by appointment**
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Class Materials ore the Imperial barrel readings, well logs and Seismic volume.

Class Methods: This will be a problem oriented class. Students will be expected to research the data provided by the Imperial Barrel Committee and produce a professional presentation for a panel of judges in Midland Texas.

Datasets:
1. Regional in scale, with 2D/3D seismic and well data (e.g. petrophysical logs, cores, core analysis results, pressures, fluids, well tests, etc.).
2. Schools may do a literature search and may only acquire free data OUTSIDE the area of interest. No data may be acquired inside the area of interest or purchased.
3. One dataset per school year will be provided by the IBA committee via CD or DVD mailed to participating schools 8 weeks prior to the date of their local competition.
4. Schools are encouraged to donate datasets to the IBA technical library. After evaluation and acceptance, the dataset will be included in the normal dataset   rotation. However, a school will not be allowed to use its own dataset because it may derive a competitive advantage from prior analytic experience.

Evaluation goals:
1. Complete a technical assessment of the prospectivity of the basin/area.
2. Define the key plays, petroleum systems, leads/prospects (including economics), and risks.
3. Make recommendations on future exploration activity based on prevailing technical and economic conditions.

Grading: goals:
1. Complete a technical assessment of the prospectivity of the basin/area.
2. Define the key plays, petroleum systems, leads/prospects (including economics), and risks.
3. Make recommendations on future exploration activity based on prevailing technical and economic conditions. If everyone participates in the discussions and contributes, there will be no final exam, which otherwise will count 10%.

What I expect you to take away from this class.

1) To be able to interpret the tectonic style and deformational and depositional history of basins.

2) The ability to critique and analyze scientific research papers and reports. You should learn how to decide if the data behind a paper is reliable and if the analysis id credible. You should learn how far a model presented in a paper can be applied reliably.

3) The ability to ask and pursue questions, to think critically, and to classify and organize data and concepts in your mind.

4) An understanding of and ability to perform several practical methods for analyzing basins. The primary of these are rheological, geohistory, backstripping and thermal history analyses.

5) To learn where depositional environments occur in basins and how they shift in response to eustatic and tectonic events within different basins.

6) To be able to infer when and where petroleum was generated and to be able to locate potential reservoir strata.

COURSE POLICIES

POLICY ON CLASS PARTICIPATION: You are expected to come to class prepared to discuss the assigned topic. You should have a good understanding of the reading and have several questions ready to discuss.

POLICY ON MAKE-UP EXAMINATIONS: NO make-up exams will be given for reasons other than illness (doctor's note required), absence with the instructor's prior approval, or when a student is on official University business (documentation required). Make-up exams will be scheduled on Fridays at 5pm. The same policy will be followed for missed laboratory work.

POLICY ON ACADEMIC HONESTY: Academic Dishonesty will not be tolerated. All university guidelines will be strictly followed. Please read these guidelines carefully. If you have any questions regarding the university policy please contact the Dean of Students.