PNGE 480
Petroleum Engineering Design

Course Definition:
Comprehensive problems in design involving systems in oil and gas production, field processing, transportation, and storage.

Policy:

- Class Participation & Attendance: 5%
- Preliminary project content and presentations: 20%
- Final Project Content: 35%
- Final Project Report: 20%
- Final Project Presentation: 20%

- Homework and projects are due at the time specified.
- Late homework or projects: 5% penalty for every class meeting.
- Attendance: Required.

Text Book:
None Required. All material will be provided throughout the semester.

References:
All the textbooks used in Petroleum Engineering courses that you have taken so far.

ABET Requirement:
In order to fulfill the ABET requirements, you will be graded in this class based on a set of criteria. CLICK HERE to see a detail on this course's grading policy.

University Social Justice Statement.

University Disability Policies
**Syllabus:**

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<th>Part 1: Introduction (Week - 1)</th>
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<td>Part 2: Introduction to Reservoir Modeling (Week - 2 through 5)</td>
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<td>Part 3: Data-Driven Reservoir Modeling (Week - 5 through 9)</td>
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<td>- Philosophy and Theory</td>
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<td>- Overview of data driven technology</td>
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<td>- Data</td>
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<td>- Model Training, Calibration and Validation</td>
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<td>Part 4: Software Tutorial (Week -10 through 11)</td>
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<td>Part 5: Final Project Review (Week -12 through 15)</td>
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**Example of past Semester Project:**

*Spring 2008*

Please note that the semester project for this semester will be either email to you or will be available on your MIX account.

Here are links to a few papers that you may use as reference in your project.

- International Journal of Oil, Gas and Coal Technology
- SPE RE&E Journal
- Journal of Natural Gas Science & Engineering
- SPE P&O Journal
- SPE 166111
- SPE 161184
- SPE 104550
- SPE 98010

**Group Evaluation:**

Since this course is fully project based and since all the requirements of the course will be completed in a group setting, it is most important that each group member provide input and participate actively in the completion of each part of the project.

After each part of the project is completed every member of the group will have a chance to evaluate other members of the group and their contribution to the project. This process will take place confidentially. CLICK HERE to see a sample evaluation form. Keep in mind that this evaluation will have an impact on the final grade you will receive in this course.
Sample Report: This is a sample report. Please look at it, hopefully it gives you an idea how to present your results in the form of a written technical report.