

**ES486 Petroleum Geology**  
**Peer-to-Peer Learning Model**  
**Journal Article Summaries/Case Study Presentations**

*(updated March 8, 2017 – Final Draft)*

**Instructions:**

Each student will be assigned a recent case-study journal article on a petroleum geology topic. The objective is to read the case study, digest the information, and create a 12-15-minute powerpoint oral presentation of the topic. The general organization of the presentation will be as follows:

- I. Introduction to the topic, with outline of the main presentation headings (introduction should include figures with maps on location of the case study)
- II. State of the problem or technique(s) addressed in the article.
- III. Methodology
- IV. Results
- V. Conclusion and Summary

Required Slides: Title Slide, Outline/Overview Slide, Introduction Slide, Conclusion and Summary Slide

Project Deliverables will include:

- A 12-15-minute powerpoint slide show with images and text on topic, summary of take-home messages
- 1-page handout / outline with key summary bullet points on topic
- Optional creative video-clip (youtube, etc.) illustrating the techniques or methods

*Note: A general rule of thumb is to allow approximately 1 minute per slide of content in a scientific presentation. Your presentation should be no more than 10-15 slides for a 12-15-minute presentation, depending on the complexity of the information you are trying to summarize. The presentations will be worth 20 points.*

**Presentation Schedule TENTATIVE**

**Download papers at following link:**

[http://www.wou.edu/las/physci/taylor/es486\\_petro/ES486\\_Case\\_Studies.htm](http://www.wou.edu/las/physci/taylor/es486_petro/ES486_Case_Studies.htm)

**Week 10 / Tuesday March 14 [HAT PARTY – Wear a Festive Hat, prizes to be awarded for creativity]**

|           |   |
|-----------|---|
| 2:00-2:10 | Taylor Introduction   |
| 2:10-2:25 | Glynn – McGregor et al., 2012, Nile Basin System  |
| 2:25-2:40 | Hubbard – Sen, 2013, Petroleum Occurrence Black Sea, Turkey                               |
| 2:40-2:55 | Childers – Holgate et al., 2013, Sedimentology and Stratigraphy of Troll Field, North Sea |
| 2:55-3:10 | Lucas – Gaswirth and Higly, 2013, Petroleum Analysis of West Edmund Field, Okla.          |
| 3:10-3:25 | Cardenas – Tozer et al., 2014, Athabasca Oil Sands  |
| 3:25-3:40 | Sutter - Hudec et al., 2013, Jurassic Salt Dome Systems, Gulf of Mexico                   |
| 3:40-3:50 | Taylor Conclusion   |

**Week 10 / Thursday March 16 [PAJAMA PARTY – Wear PJs or creative night wear, prizes for style]**

|           |  |
|-----------|--|
| 2:00-2:10 | Taylor Introduction  |
| 2:10-2:25 | Edwards – Bust et al., 2013, Petrophysical Analysis of Shale Gas Reservoirs          |
| 2:25-2:40 | Fricke – Neumair et al., 2014, Seal Assessment of Venezuela                          |
| 2:40-2:55 | L. Taylor – Burgess et al., 2013, Identification of Carbonate Build-Ups with Seismic |
| 2:55-3:10 | Muncrief – Amour et al., 2013, Carbonate Ramp Reservoirs                             |
| 3:10-3:25 | Jacobus – <b>Johansen, 2013, Seismic Facies Analysis Svalbard</b>                    |
| 3:25-3:50 | Taylor Conclusion  |

**Topics of Choice: Choose one unique case-study journal article per student**

[Amour et al., 2013, Carbonate Ramp Reservoirs](#)  
[Baytok and Panter, 2013, Fault and Fracture Reservoirs Piceance Basin, Colorado](#)  
[Beglinger et al., 2013, Subsidence History and Thermal Maturation, Campos Basin, Brazil](#)  
[Boro et al., 2014, Fracture Analysis of Reservoirs, Northern Italy](#)  
[Burgess et al., 2013, Identification of Carbonate Build-ups with Seismic Reflection](#)  
[Bust et al., 2013, Petrophysical Analysis of Shale Gas Reservoirs](#)  
[Fan et al., 2012, Reservoir Fracture Propagation During Oil to Gas Transformation](#)  
[Gaswirth and Higley, 2013, Petroleum Analysis of West Edmond Field, Oklahoma](#)  
[Grant et al., 2014, Porosity trends in the Skagerrak Formation, Central Graben, United Kingdom](#)  
[Grotzinger and Alrawai, 2014, Carbonate Reservoirs, Sultan of Oman](#)  
[Haddad and Mancini, 2013, Reservoir characterization of Jurassic Smackover Formation, Southwest Alabama](#)  
[Holgate et al., 2013, Sedimentology and stratigraphy of the Troll Field, North Sea](#)  
[Hudec et al., 2013, Jurassic Salt Dome Systems, Gulf of Mexico](#)  
[Hudec et al., 2013, Louann Salt Gulf of Mexico](#)  
[Johansen, 2013, Seismic Facies Analysis Svalbard](#)  
[Karakitsios, 2013, Ionian Sea Petroleum Systems](#)  
[Kohl et al., 2014, Gas Reservoirs in the Marcellus Shale, Appalachian Basin](#)  
[Li et al., 2014, Resistivity as a Tool for Permeability Analysis](#)  
[Macgregor et al., 2012, Nile Basin System](#)  
[Max and Johnson, 2014, Gas Hydrates](#)  
[Milliken et al., 2013, Gas Reservoirs in the Marcellus Shale, Pennsylvania](#)  
[Moscardelli et al., 2013, Seismic Analysis of the Heidrun Field Norway](#)  
[Neumaier et al., 2014, Seal Assessment of Venezuela](#)  
[Nguyen et al., 2013, Diagenetic Effects on Reservoir Porosity in the North Sea](#)  
[Okere et al., 2013, Hydrocarbon Potential in Kazakstan](#)  
[Rateau et al., 2013, Igneous Intrusion and Hydrocarbon Accumulation in Shetland](#)  
[Roberts et al., 2013, Basin Modeling](#)  
[Sen, 2013, Petroleum occurrence in the Black Sea, Turkey](#)  
[Shimer et al., 2014, Basin Analysis of the Nanushuk Formation, Alaska](#)  
[Tozer et al., 2014, Athabasca Oil Sands](#)  
[Zeeb et al., 2013, Outcrop Fracture Analysis and Reservoir Permeability](#)