# BUSE 3331 – Single Well Economics

* Production Economics
  + Drilling
    - Location Preparation: $450,000
    - Rig & Mobilization / Demobilization - $1.15M
    - Directional Drilling, Cementing, Fuel - $1.7M
    - Casing - $1.15M
  + Completion Costs
    - Stimulation - $2.9M (Fracing)
    - Perforating, Flowback Water - $1.35M
    - Tubing and Surface Equipment - $175,000
  + Operating Expenses
    - Lease Operating Expenses
      * Labor & MX
      * Water disposal costs
      * Fuel costs for pumps, etc.
      * Property taxes, insurance, etc.
    - Gathering & Transportation Costs
      * Pump costs to move from wellhead to treatment facilities
      * Extraction of natural gas liquids
      * Gas treatment
  + Production Taxes
  + Royalty Rates
    - Royalty- % of gross production revenue (usually before production costs)
    - Severance or Production Tax – a % or can be a flat amount per unit
    - Revenue – Net back pricing
  + Initial Production Rate
  + Decline Curves
    - Factors
      * Initial Production
      * Decline Rate
      * Estimated Ultimate Recovery (EUR)
    - Percentage decline rates used by business analysts
  + Estimated Ultimate Recovery
  + Commodity Price

1, 2