



UNIVERSITY of
DENVER

DANIELS COLLEGE OF BUSINESS
Franklin L. Burns School of Real
Estate & Construction Management

ENERGY FINANCE & MANAGEMENT (EF&M) CERTIFICATE

FINANCING OIL AND GAS DEALS

This course is perfect for anyone wanting to better understand economic and financial decision making in the oil business and the language of finance and accounting professionals. The course will be useful to land personnel, attorneys, investors, investment advisors, chief financial officers, controllers, treasurers, financial analysts, asset team leaders, those moving from technical functional roles to general roles, and any personnel responsible for or affected by the financial health of the company as determined by financial decisions of the company. The combination of oil and gas price declines, beginning in July of 2008, and the general unavailability of credit has caused oil and gas producers to have a difficult time finding sources of capital for their ongoing business needs. Although oil is back up to over \$90 per barrel, the oil and gas industry is still needful of large amounts of capital that are required to operate an oil and gas company. Those who invest grow weary of sometimes long delays between the date of investment and any returns. When marginal tax brackets were higher and the tax code more friendly to tax shelter investors, life was easier for such companies. Commercial banks that were, until recently, structuring loans where they would give value to a company's probable and possible reserves, are starting to back away from making loans to any oil and gas company other than those with the highest credit ratings. Given this lack of liquidity, lenders and investors are looking for higher returns on their investments while, at the same time, limiting their exposure to the risk of the bankruptcy or insolvency of the oil and gas producers in which they are investing. This course helps answer questions as to how oil and gas producers can attract additional sources of capital in order to drill wells and develop properties that they may have acquired when commodity prices were significantly higher. Because of this divergence of interests between oil and gas producers and financing institutions and the limited capital available in the market today, more creativity and flexibility are valued. Structures foreign to the conventional borrowing base revolving credit facility or similar lending vehicles may not be available and resorting to other methods may be the key to survival and growth. In this class students will examine Regulation D securities offerings, volumetric production payments, net profits interests, equity kicker financings, royalty trusts, attracting tax-exempt investors and the growing use of Islamic finance along with a combination of lecture and workshop methods as we compare some of these less traditional financing methods with more traditional energy lending. In each category of financing possibilities we will review risk allocation and mitigation, tax treatment and the impact of bankruptcy or termination of the underlying relationship, e.g. the impact of lease termination on overriding royalties, production payments and net profits interests. This course is taught with a combination of lecture and workshop methods.

DELAY RENTALS, SHUT IN ROYALTIES AND LEASE ADMINISTRATION

This course is an in-depth study of shut-in royalties, delay rentals, and related aspects of lease administration. We take a practical approach to both basic and advanced problems arising from the shut-in royalty and drilling-delay rental clauses. Emphasis is on problem solving, with a special session on current problems.

Content includes: Fundamentals of the shut-in royalty clause, including when payments are due, effect of improper payment and practical exercises; Basic principles of delay rentals including a discussion of the interpretations of this clause, "unless" and "or" clauses, how to satisfy the drilling delay rental clause and practical exercises; How to handle special problems of delay rental administration including the effect of transfers on the lease, unit operations and pooling and Pugh provisions, federal, state and Indian leases, and practical exercises; Excuses for improper payment and escape clauses including waiver and estoppel, savings clauses and practical exercises; Managing the rental section including organizing lease records, documenting rental payments, relationship of the lease administrator with landmen and attorneys and practical exercises; Organizing for special lease payment problems including change of ownership and after-acquired title, shut-in royalties, advance minimum royalties and practical exercises.

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- Excuses for improper payment and escape clauses including waiver and estoppel, savings clauses and practical exercises.
- Managing the rental section including organizing lease records, documenting rental payments, and relationship of the lease administrator with landmen and attorneys and practical exercises.
- Organizing for special lease payment problems including change of ownership and after-acquired title, shut-in royalties, advance minimum royalties and practical exercises

ECONOMIC AND FINANCIAL METHODS AND SUCCESSFUL USE OF HEDGING IN THE OIL PATCH

This course provides an introduction to the fundamental principles of investment strategies and financing in competitive domestic and global energy finance markets. We will discuss the basics of energy lending and such sources of funds as production payments and net profits interests. In order to facilitate such understanding, part of the course will include critical finance concepts needed to better understand energy finance as a whole. As such, we begin with Fundamentals of the time value of money. Students will be able to define, explain and/or calculate net present value, rate of return, and opportunity of cost capital. They will gain an understanding of the nature of financial decision-making; including how to turn accounting profit (net income) into cash flow. Students will have an overview of maximizing shareholders wealth. Then, we cover Interest rates & compounding. Students will learn the distinction between compound interest and simple interest as well as the nominal interest rate and the real interest rate. In addition, students will understand the relationships between the various interest rates and how they affect financial decision making. The basic principles of share valuation and the use of discounted-cash-flow models to estimate expected rates of return will also be addressed. Next, we cover Asset Valuations and Asset Valuation Models. Students will learn how to apply these theories in financial decision making. Next, we will cover Cash Flow Analysis & Capital Budgeting Criteria. Students will learn how energy companies will develop plans and budgets for capital investments and how to make project "go/no-go" decisions. This includes understanding NPV, IRR, Modified IRR, PI ratio. Also addressed are normal cash flows versus non-normal cash-flows and their significance in decision-making. Students will learn what key indicators a financial manager needs to look for in relation to capital structure. Through this discussion students will understand the significance of weighted-averages as well as the price of debt and equity. Derivatives and Hedging is our next topic. Students will receive learn about derivatives forwards, futures, options and swaps. They will understand the basics of each as well as the relationship as a risk management tool. Students will acquire understanding of the role of finance techniques and practices in the context of regulatory and policy regimes, competitive markets and long term demands for a wide range of energy systems.

While this class is focused on the field of energy finance, students do not need to be, nor will they be specialists in financing methods when the class is over. They will, however, be exposed to the fundamentals of energy finance and the application of decision analysis by energy companies and specialists in the field. This will provide a broader understanding of the issues facing the energy industry and individual companies.

OIL AND GAS TAX

This course packs a tremendous amount of usable information into one day. Aimed mainly at understanding the incentives that attract oil and gas investors, we consider key issues such as: Defining Intangible Drilling and Development Costs and how to deduct them, The Election to Deduct IDCs, The Section 59(e) Election to Capitalize IDCs, Prepaid IDCs, Intangible Completion Costs, The Economic Interest Concept, Cost Depletion (Basis for depletion, *Adjusted basis*, Total Recoverable Units, Figuring the Cost Depletion Deduction). Percentage Depletion in General and Figuring the Percentage Depletion Deduction, Limitations of Section 613A on Independent Producers and Transferees who cannot claim percentage depletion), Depreciation of Oil and Gas Lease and Well Equipment, MACRS for Lease and Well Equipment, Sales of Oil and Gas Property and Sec. 1254 Recapture, Carved Out and Retained Production Payments, Like Kind Exchanges of Oil and Gas Properties, Tax Credits, Lease Operating Expenses, Avoiding the Alternative Minimum Tax. The elective safe harbor for owners of oil and gas property, Independent Producers and Royalty Owners, Partnerships and S Corporations, the Federal income tax treatment of an oil and gas partnership using subchapter K of the IRC. A combination of lecture and workshop methods will be used. This course is ideal for landmen, land techs, oil and gas industry personnel, accountants and investment advisors who want to learn more about the impact of oil and gas tax law on investing in oil and on raising money for oil and gas development

ROYALTIES AND DIVISION ORDERS

This course is designed for oil and gas personnel who are responsible for the preparation of division orders or who must understand and apply royalty clauses and division orders. We present background information to develop and understanding as to the reasons that underlie the preparation and maintenance of division orders, followed by instruction with practical exercises in the preparation of division orders and description of the proper management of producing properties with emphasis on the practical problems encountered.

Content includes:

- Definition of terms including payments made under oil and gas leases, interests created by landowners, interests created by lessees, transactions commonly used in development and terms used to describe size of interests.
- The royalty clause including common provisions and variations, payment of royalty and the effect of pooling and unitization.
- The division orders including nature and effect and common provisions.
- The transfer order including effect of ownership changes and the effect of status changes.
- Preparation of division orders including identifying and describing lands and leases, determining the various interests involved and calculating interests.
- Maintaining the division order.
- Typical problems with solutions.
- Practical exercises in division order preparation.
- Management of producing properties including identification, date of first sales, title opinions, marketing arrangements, information flow and questions and answers.

STRUCTURING EXPLORATION DEALS

This course details aspects of contracts with special emphasis on tax and economic implications of alternative deals. The objective of this class is to provide some review of the various contracts used in making exploration deals and present the tax and financial advantages and pitfalls of alternative deals. This course should be of particular benefit to landmen, lawyers, geologists, geophysicists, engineers, bankers, accountants and managers at all levels.

The course will cover basic principles of contract preparation and negotiation including the impact of current industry conditions, basic principles of contract law and principles common to all oil and gas contracts. It will also cover available deal alternatives including: Support agreements, Farmout/Farming agreements, Wellbore depth earned, Seismic options, Area of Mutual Interests "AMIs", Carried interests, Drilling Contracts, Day work Contract, Footage Contract, Turnkey Contract, Net profits interests, Joint operating agreements, Exploration agreements, Use of production payments, Disposing of oil and gas properties, Effective use of Confidentiality Agreements, Effective use of Letters of Intent, Assignments, The Joint Venture Agreement and the Preferential Right to Purchase.

Also, the course will cover the basic concepts of oil and gas taxation including oil and gas tax overview, tax partnerships, Pool of Capital concept, lease acquisition costs and depletion, equipment costs and investment tax credit, intangible drilling and development/completion costs, tangible completion expenses, depletion and depletion allowance, the impact of percentage depletion and delay rental capitalization rates and alternative minimum tax. The practical application of evaluating deal alternatives using techniques such as net present value, internal rate of return, payback, discounted payback, ROI, profitability index, MIRR and expected value will be discuss in class and through workshop application. Students are requested to bring a pocket calculator for workshop calculation.