COMMODITIES (CMDT)

CMDT 1000 - Introduction to Commodities (1 Credit)

Introduction to Commodities will expose students to the business side of commodity markets – energy, minerals and agriculture. Students will learn about potential career options in commodities including risk management, supply chain, trading, and investment analysis. Students will have the opportunity to access various state of the art learning technologies that the J.P. Morgan Center for Commodities offer, such as: Bloomberg, Morningstar, and CQG through live demonstrations. This class will have the opportunity to meet and interact with guest speakers and industry executives as well as attend field trips to various commodity sites. Examples may include visiting Newmont Mining's gold mine in Cripple Creek and visiting Excel Energy and/or Ardent Mills' trading floors in downtown Denver to further learn the business skills required for these types of positions. Max hours: 1 Credit.

Grading Basis: Satisfactory/Unsatisfactory

CMDT 2100 - The Future of Energy (3 Credits)

This class provides students with an introduction to energy and how it supports our everyday lives, from how these sources powers our homes, drives the food we eat, the clothes we wear and enables our mobility. Students will gain understandings of the various forms of energy, including both non- and renewable sources, including how these are produced, transported, traded, and consumed here in Colorado, in the U.S. and around the world. Students will explore key topics including energy emissions, climate change as well as topical geopolitical events related to energy. Importantly, students will research and provide opinions on realistic scenarios and opportunities that we may expect for our energy future. Max hours: 3 Credits.

Grading Basis: Letter Grade Typically Offered: Fall.

CMDT 4490 - Commodity Trading (3 Credits)

This is a co-listed class with the J.P. Morgan Center for Commodities and the Finance Department. This course focuses on how securities and futures contracts are designed and traded including trading exchange operations, regulation, trading mechanisms and processes. Students will learn the theory and practice of securities and futures contract trading with a focus on hands-on trading experience using industry software (CQG and Bloomberg) as well use of data sources (Morningstar). In this course, we will review the origins of liquidity, volatility, price efficiency, and trading profits. Next we will cover a host of topics concerning equity and commodity trade execution strategies, such as why and how investors trade, what and when investors profit from investing and speculating, the key principles of high-frequency trading and investor's overconfidence, why market institutions are organized as they are, and the role of public policy in the markets. Cross-listed with CMDT 6490, FNCE 4490 and FNCE 6490. Max hours: 3 Credits.

Grading Basis: Letter Grade

CMDT 4582 - Commodity Supply Chain Management (3 Credits) This course introduces the design, analysis, management, and control of supply chains as applied to commodities. The course covers integration of processes and systems, relationship management of upstream and downstream supply chain players, and commodity-specific supply chain strategies. Cross-listed with CMDT 6582. Restriction: Restricted to undergraduate students at a junior standing or higher. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to undergraduate students at a junior standing or higher

CMDT 4682 - Commodity Valuation and Hedging (3 Credits)
This course is a practical introduction to commodity markets. Students will learn how commodities are managed in the global markets from a hedgers, speculators and arbitrageurs point of view. Understanding the relationships between commodities and the global economy will be investigated. In addition, commodities will be looked at as an asset class and cross-asset relationships will be studied. Students will be introduced to futures and options markets analysis deploying strategies professional traders use in diverse market conditions. Students will work with the various trading software throughout the course and gain proficiency in

Restriction: Restricted to undergraduate Business majors with junior standing or higher

real-world trading. Cross-listed with CMDT 6682. Max hours: 3 Credits.

CMDT 4782 - Commodity Data Analysis (3 Credits)

Grading Basis: Letter Grade

This course is an applied introduction commodity data analysis. Students will learn how to analyze commodity prices using quantitative and qualitative techniques. Relationships between commodities and the global economy will be investigated. In addition, commodities will be looked at as an asset class and cross-asset relationships will be studied. Students will be introduced to forecasting techniques and be able to develop and evaluate various forecasting models. Students will work with the open source Python software throughout the course and gain proficiency. Topics include: regression analysis, univariate models, non-stationarity, vector autoregressions, cointegration, volatility modeling, principal component analysis, Python programming, and other topics time permitting. Cross-listed with CMDT 6782. Max hours: 3 Credits. Grading Basis: Letter Grade

CMDT 4802 - Foundations of Commodities (3 Credits)

This course introduces students to the physical aspects of commodities and connects them to the financial markets in which commodities are traded. Fundamental concepts and terminology necessary for understanding commodity production, transportation, economics, financial analysis and marketing are described. Supply chains for several specific commodities are reviewed in detail, as examples of the production and market structure knowledge needed to be successful professional participants in commodity trading capacities. The course also serves a foundation for more focused education in the specific commodity sectors, as well as the applied use of marketing and financial trading concepts learned in other courses. Cross-listed with CMDT 6802 and FNCE 4802/6802. Restriction: Restricted to undergraduate students at a junior standing or higher. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to undergraduate students at a junior standing or higher