# 2011-13 Cal Poly Catalog

# **Economics Area, Orfalea College of Business**

## **ECON-ECONOMICS**

#### ECON 200 Special Problems for Undergraduates (1-2)

Individual investigation, research, studies, or surveys of selected problems. Total credit limited to 4 units, with a maximum of 2 units per quarter. Prerequisite: Sophomore standing and consent of department head.

#### ECON 201 Survey of Economics (4)

GE D

Basic principles of microeconomics and macroeconomics. Emphasis on applications to current national and global economic issues. For majors requiring one quarter of economics. Not open to students having previous credit in ECON 222 or equivalent. 4 lectures. *Crosslisted as ECON/HNRS 201*. Fulfills GE D2.

#### ECON 221 Microeconomics (4)

Microeconomic principles. Marginal and equilibrium analysis of commodity and factor markets in determination of price and output. Normative issues of efficiency and equity. 4 lectures.

#### ECON 222 Macroeconomics (4)

GE D

Introduction to economic problems. Macroeconomic analysis and principles. Aggregate output, employment, prices, and economic policies for changing these variables. International trade and finance. Issues of economic growth and development. Comparative economic systems and economies in transition. 4 lectures. Fulfills GE D2.

# ECON 270 Selected Topics (1-4)

Directed group study of selected topics. The Schedule of Classes will list title selected. Total credit limited to 8 units. 1 to 4 lectures. Prerequisite: Open to undergraduate students and consent of instructor.

# ECON 303 Economics of Poverty, Discrimination and Immigration (4) GE D

Economic analysis of the cause, extent and impact of poverty, discrimination and immigration and of the policies designed to address these socioeconomic issues. Emphasis on the experience of African-Americans, Latinos, and women in the United States. 4 lectures. Prerequisite: Junior standing; completion of GE Areas A, D1, and either ECON 221 and ECON 222, or ECON 201. *Crosslisted as ECON/HNRS 303*. Fulfills GE D5 except for Economics majors. Fulfills IISCP

# ECON 304 Comparative Economic Systems (4) GE I

Analysis of economic systems as a set of mechanisms and institutions for decision making, and the implementation of decisions regarding income distribution, the levels of consumption and production, and the level of economic welfare. 4 lectures. Prerequisite: Junior standing; completion of GE Areas A, D3, and either ECON 221 and ECON 222, or ECON 201. Fulfills GE D5 except for Economics majors.

# ECON 311 Intermediate Microeconomics I (4)

Consumer behavior and the theory of demand; production, cost, supply functions; perfect competition; monopoly and oligopoly; the economics of information technology. 4 lectures. Prerequisite: MATH 142 or MATH 221, and STAT 252 or STAT 302, and either ECON 221 and ECON 222, or ECON 201.

#### ECON 312 Intermediate Microeconomics II (4)

Game theory; risk, uncertainty and information; choice over time; asset markets; general equilibrium; welfare economics, externalities and public goods. 4 lectures. Prerequisite: ECON 311.

# ECON 313 Intermediate Macroeconomics (4)

Analysis of national income, price level, employment, international trade and economic growth. Development of the theory of national income determination. Evaluation of roles of monetary and fiscal policy. 4 lectures. Prerequisite: ECON 311 or ECON 312. *Effective Winter 2012*.

## ECON 322 Economic History of the Advanced World (4) GE D:

Analysis of the growth of economic institutions from about 600. Includes the spread of economic structures and institutions to colonies. Analyzes the internal development of the industrial economy in Europe and its expansion to other parts of the globe. 4 lectures. Prerequisite: Junior standing; completion of GE Areas A, D3, and either ECON 221 and ECON 222, or ECON 201. Fulfills GE D5 except for Economics majors.

#### ECON 324 American Economic History (4)

Topical and statistical analysis of the major trends and events of American economic history. Examines the causes and evolution of the United States

economy from colonial times to the present. Assessment of agriculture, transportation, industrial and government sectors and their interconnections. 4 lectures. Prerequisite: Completion of GE Areas A, D1, and either ECON 221 and ECON 222, or ECON 201.

# ECON 325 Economics of Development and Growth (4)

Analysis of the economy of less developed countries, and a survey of public policies designed to stimulate economic growth and reduce poverty. Topics include financing development, technology, population problems, human capital, rural and urban development, trade policy and the economic relationships between developed and developing nations. 4 lectures. Prerequisite: Completion of GE Areas A, D3, and either ECON 221 and ECON 222, or ECON 201.

#### ECON 330 International Trade (4)

Theory of comparative advantage, gains from trade, and recent developments in trade theory; examination of tariffs, quotas, exchange controls, other trade barriers and underlying policy issues; review of U.S. commercial policy, GATT, the common market, regional and world economic organizations. 4 lectures. Not open to students with credit in ECON 404 or equivalent. Prerequisite: Either ECON 221 and ECON 222, or ECON 201.

# ECON 337 Money, Banking and Credit (4)

Financial markets and institutions. Structure of the banking industry and impacts of technological change in banking. Structure and operations of the Federal Reserve. Impacts of monetary policy on the economy. 4 lectures. Prerequisite: Either ECON 221 and ECON 222, or ECON 201.

#### ECON 339 Econometrics (4)

Application of statistical methods useful in economics. General linear regression model. Specific issues and problems related to economic models: multicollinearity, autocorrelation, heteroscedasticity, dummy variables, lagged variables, and simultaneous equation estimation. Application and evaluation of selected examples of empirical economic research. Microcomputer applications. 3 lectures, 1 activity. Prerequisite: MATH 142 or MATH 221, and STAT 252 or STAT 302, and either ECON 221 and ECON 222, or ECON 201, or consent of instructor

#### ECON 340 Advanced Econometrics (4)

Advanced topics in undergraduate econometrics. Single equation estimation topics including: distributed lag models, causality, cointegration and error correction models and nonlinear estimation. Forecasting with a single equation model. Simultaneous equation estimation, including instrumental variables, two stage least squares and seemingly unrelated regression. 3 lectures, 1 activity. Prerequisite: ECON 339.

# ECON 400 Special Problems for Advanced Undergraduates (1-4)

Individual investigation, research, studies, or surveys of selected problems. Total credit limited to 4 units. Prerequisite: Consent of department head.

## ECON 403 Industrial Organization (4)

Application of basic tools of economics to American Industry. Case studies of individual firms and industries. Performance of various business structures, such as monopoly and oligopoly. Effects of government regulation and antitrust policy. 4 lectures. Prerequisite: ECON 311 or consent of instructor.

# ECON 404 International Trade Theory (4)

Theory of comparative advantage, neoclassical model of trade, offer curves and terms of trade, edgeworth boxes, valuation of factor inputs, effects of migration and mobility of funds, emerging growth and trade distortions, welfare effects of trade, and recent developments in trade theory. 4 lectures. Prerequisite: ECON 311 or consent of instructor

# ECON 405 International Monetary Economics (4)

Nature of international payments, U.S. balance of payments. Theory and practice of foreign exchange rate determination under the gold standard, paper standard, and IMF system; international money and capital markets; problems of international liquidity and monetary stability. 4 lectures. Prerequisite: ECON 311 or consent of instructor.

# ECON 406 Applied Forecasting (4)

Causes and measurement of business fluctuations. Techniques of forecasting with microcomputer applications. 3 lectures, 1 activity. Prerequisite: ECON 311 and ECON 339, or consent of instructor.

## ECON 408 Mathematical Economics (4)

Applications of quantitative techniques to topics in microeconomic and macroeconomic theory. Use of multivariate calculus and linear algebra in formulating static economic models. Applications of statistical inference, estimation and forecasting in economic models. 4 lectures. Prerequisite: ECON 313, or consent of instructor.

#### ECON 409 Probability Models for Economic Decisions (4)

Decision making in complex, realistic situations. Simulation of random variables in Excel. Risk aversion. Subjective assessment of probabilities and correlations. Decision trees. Optimal bidding in auctions. The winner's curse. Moral hazard and risk sharing. Repeated investment decisions under risk. 4 lectures. Prerequisite: ECON 311, or consent of instructor.

#### ECON 410 Public Finance and Cost-Benefit Analysis (4)

Principles of rational decision making with respect to government revenues and spending. Measurement of costs and benefits, and criterion selection. Taxation, user fees, deficit financing, public goods, neighborhood effects and zoning. Microcomputer applications. 4 lectures. Prerequisite: ECON 311, or consent of instructor.

## ECON 413 Labor Economics (4)

Wage determination theory, basic economic factors that affect the labor movement, economic impact of union activities on employment, output, income, wages, prices, and national economic policy. 4 lectures. Prerequisite: ECON 311, or consent of instructor.

#### ECON 417 Development of Economic Analysis (4)

Analysis of ideas related to the development of economic theory in the Western civilization from the Greeks through the classical, neoclassical, and Keynesian to the current post-Keynesian concepts. 4 lectures. Prerequisite: ECON 311, or consent of instructor.

#### ECON 420 Advanced Macroeconomics (4)

Macroeconomics for advanced students. Inflation, unemployment, interest rates, real output, exchange rates, business cycles and macroeconomic policy. Analysis of current data on the macro-economy within the scope of competing views on the macro-economy. 4 lectures. Prerequisite: ECON 313, or consent of instructor.

#### ECON 424 Monetary Economics (4)

The role of money in our economy. Focus on the links between monetary policy, interest rates, prices, housing markets, mortgage lending and overall economic activity. Public policy issues relating to real estate markets. 4 lectures. Prerequisite: ECON 311 or consent of instructor. Recommended: ECON 313.

#### ECON 430 Internship (2-8) (CR/NC)

Placement of student for part-time supervised work experience in a business enterprise or government agency approved by the area chair. Collateral reading correlated with work assignments and periodic written progress reports required. Credit/No Credit grading only. Prerequisite: approval of area chair, junior standing, and a CPSLO cumulative GPA of at least 2.5 without being on academic probation.

# ECON 431 Environmental Economics (4)

Economic dimensions of environmental abuse and protection. Use of simple economic models in developing and evaluating environmental policies. Overview of current environmental problems. Issues related to the sustainability of economic growth at the national and international levels. 4 lectures. Prerequisite: ECON 311. or consent of instructor.

# ECON 432 Economics of Energy and Resources (4)

Economic theory and public policies as applied to problems of natural resources and energy. Dynamic resource and energy models developed with reference to public and private sector growth. Application of the principles of capital theory emphasized. Case studies. Computer software applications in the study of natural resources and energy under uncertainty. 4 lectures. Prerequisite: ECON 311, or consent of instructor.

# ECON 434 Urban Economics (4)

Application of basic tools of economic analysis to problems of urban regions. Causes and possible cures for inadequate growth rate, income levels, and the quality of life in urban regions. 4 lectures. Prerequisite: ECON 311, or consent of instructor.

#### ECON 435 Economics of Land and Water (4)

Economic analysis of natural resource issues, policies and management with an emphasis on land and water use decisions in the western U.S. Urban demand for water; water supply and economic growth; economic impacts of surface water law and institutions; economics of land management. 4 lectures. Prerequisite: ECON 311, or consent of instructor.

#### ECON 461, 462 Senior Project I, II (2) (2)

Selection and analysis of a problem under faculty supervision. Problems typical of those which graduates must solve in their fields of employment. Formal report is required. Minimum 120 hours total time. Prerequisite: ECON 313 and senior standing.

#### ECON 464 Applied Senior Project (4)

Analysis of selected economic topics and problems in directed individual or group-based projects, which require application of economic models, principles and theory to investigate important business, economic or social issues. Formal report required. 4 seminars. Prerequisite: ECON 313 and senior standing.

# ECON 470 Selected Advanced Topics (1-4)

Directed group study of selected topics for advanced students. Open to undergraduate and graduate students. The Schedule of Classes will list title selected. Total credit limited to 8 units. 1 to 4 lectures. Prerequisite: Consent of instructor

## ECON 500 Independent Study (1-4)

Advanced study planned and completed under the direction of a departmental faculty member. Open only to graduate students demonstrating ability to do independent work. Enrollment by petition. Prerequisite: Consent of department head.

#### ECON 510 Quantitative Methods (4)

Review and discussion of the basic math tools needed for graduate work in economics, including set theory, linear algebra, properties of functions, static and dynamic optimization. 4 lectures. Prerequisite: ECON 408 or MATH 244 or equivalent, and graduate standing, or consent of instructor.

#### ECON 511 Microeconomic Analysis (4)

Basic microeconomic theory including theory of the firm, consumer theory, general equilibrium, capital theory, and welfare economics. 4 lectures. Prerequisite: Concurrent with ECON 510 and graduate standing, or consent of instructor.

#### ECON 512 Macroeconomic Analysis (4)

Basic macroeconomic theory including markets for commodities and credit, the demand for money, market-clearing and the labor market, inflation and interest rates, investment, real business cycles and unemployment, economic growth, government consumption and the role of public services, and taxes, transfers, and the public debt. 4 lectures. Prerequisite: ECON 511 and graduate standing, or consent of instructor.

#### ECON 520 Advanced Econometrics I (4)

The use of statistical procedures to measure theoretical economic relationships and to verify and reject theories. Advanced coverage of regression analysis and hypothesis testing. 4 lectures. Prerequisite: ECON 339, ECON 511 and graduate standing, or consent of instructor.

# ECON 522 Advanced Econometrics II (4)

The use of statistical procedures to deal with simultaneous equations, limited dependent variables and time-series data. Includes methods of instrumental variables, generalized method of moments and maximum likelihood. 4 lectures. Prerequisite: ECON 520 and graduate standing, or consent of instructor.

## ECON 532 Environmental and Natural Resource Economics (4)

Economic analysis of pollution, congestion, public good provision, and natural resource conservation. Static and dynamic efficiency, economic growth and sustainability, pollution taxes, marketable permits, and the design of market-based regulations. 4 lectures. Prerequisite: ECON 511 and graduate standing, or consent of instructor

# ECON 534 International Economics (4)

Analysis of the international movement of goods, services, capital and payments. The role of exchange rates, tariffs, quotas, and transport costs. Relationship between international trade and economic growth. 4 lectures. Prerequisite: ECON 511 and graduate standing, or consent of instructor.

#### ECON 536 Public Economics (4)

Economic analysis of the rationale for public expenditure and taxation. Externalities, pollution and public policy, income redistribution and public welfare, public goods, collective choice and political institutions, public budgeting techniques and cost-benefit analysis, taxation and tax policy, statelocal finance and fiscal federalism. 4 lectures. Prerequisite: ECON 511 and graduate standing, or consent of instructor.

#### ECON 538 Industrial Economics (4)

Economic theories of industrial organization with specific reference to such topics as cartels, market concentration and performance, vertical integration, franchise contracts, ownership and control of firms, multipart and discriminatory pricing, and tie-in sales. Economic aspects of antitrust law and government regulation of industry. 4 lectures. Prerequisite: ECON 511 and graduate standing, or consent of instructor.

## ECON 570 Selected Advanced Topics (1-4)

Directed group study of selected topics for graduate students. Open to undergraduate and graduate students. The Schedule of Classes will list title

selected. Total credit limited to 8 units. 1-4 lectures. Prerequisite: Graduate standing or consent of instructor.

## ECON 580 Seminar in Economics (1-4)

Advanced topics in economics chosen according to the common interests and needs of the students enrolled. Schedule of Classes will list topic selected. 1-4 seminars. Prerequisite: Graduate standing or consent of instructor.

# ECON 599 Thesis (4)

Individual research under the general supervision of the faculty, leading to a graduate thesis of suitable quality. Minimum of 8 units required for degree. Prerequisite: Graduate standing and consent of thesis committee.