## Economics Courses (ECON)

**ECON Courses**

This is a list of courses with the subject code ECON. For more information, see Economics (Tippie College of Business) in the Catalog.

**ECON:1100 Principles of Microeconomics** [4 s.h.]
Organization, workings of modern economic systems; role of markets, prices, competition in efficient allocation of resources and promotion of economic welfare; international trade. Requirements: B.B.A. students cannot use this course for GE CLAS Core Social Sciences. GE: Social Sciences.

**ECON:1200 Principles of Macroeconomics** [4 s.h.]
National income and output, unemployment, and inflation; economic growth and development; money and credit; monetary and fiscal policy; government finance; international finance. Requirements: B.B.A. students cannot use this course for GE CLAS Core Social Sciences. GE: Social Sciences.

**ECON:1300 First-Year Seminar** [1 s.h.]
Small discussion class taught by a faculty member; topics chosen by instructor; may include outside activities (e.g., films, lectures, performances, readings, visits to research facilities).

**ECON:3100 Intermediate Microeconomics** [3 s.h.]
Economic theory of the behavior of consumers, producers, and other economic agents; role of markets in coordinating economic activity; effects of government policies on market outcomes; conditions that markets require for efficient allocation of resources; market imperfections; strategic behavior of economic actors. Prerequisites: ECON:1100 and (MATH:1350 or MATH:1380 or MATH:1460 or MATH:1550 or MATH:1850 or MATH:1860).

**ECON:3125 Intermediate Microeconomics: Advanced** [3 s.h.]
Economic theory of the behavior of consumers, producers, and other economic agents; role of markets in coordinating economic activity; effects of government policies on market outcomes; conditions that markets require for efficient allocation of resources; market imperfections; strategic behavior of economic actors. Similar to ECON:3100, but with more rigorous examination of topics and use of calculus. Prerequisites: ECON:1100 and MATH:1850 and MATH:1860.

**ECON:3150 Intermediate Macroeconomics** [3 s.h.]
Measurement of macroeconomic indicators; economic growth and business cycles; use of macroeconomic models to study the role of government fiscal and monetary policies. Prerequisites: ECON:1200 and (MATH:1350 or MATH:1380 or MATH:1460 or MATH:1550 or MATH:1850 or MATH:1860).

**ECON:3300 Introduction to Econometrics** [3 s.h.]
Statistical tools used in economic analysis; regression models; estimation and hypothesis testing; causal effects; application to economic data and questions; use of statistical software. Prerequisites: STAT:1030 and (MATH:1350 or MATH:1380 or MATH:1460 or MATH:1550 or MATH:1850 or MATH:1860).

**ECON:3325 Personnel Economics** [3 s.h.]
Microeconomic analysis of labor markets with special emphasis on strategic personnel choices of the firm; labor supply decisions made by workers; labor demand decisions made by firms; labor market equilibrium; returns to education; hiring, job design, evaluation, and compensation. Prerequisites: ECON:1100.

**ECON:3335 Money, Banking, and Financial Markets** [3 s.h.]
Role of money and financial institutions in determining domestic and international income, employment, and prices. Prerequisites: ECON:1100 and ECON:1200.

**ECON:3345 Global Economics and Business** [3 s.h.]
Modern theories of international trade and investment; impact of tariffs and other restrictions on international trade; effects of export and production subsidies; free trade agreements; exchange rates and foreign exchange markets; international monetary arrangements; balance of payments; international economic policy. Prerequisites: ECON:1100 and ECON:1200.

**ECON:3350 Industry Analysis** [3 s.h.]
Structural evolution; imperfect competition; resource allocation; development of public policy on monopoly; selected industries. Prerequisites: ECON:3100.

**ECON:3355 Economic and Business Forecasting** [3 s.h.]
Development and utilization of forecasts of business and economic variables; application of modern statistical methods and software to quantitative forecasting problems. Prerequisites: ECON:1100 and ECON:1200 and (ECON:3300 or ECON:4800 or STAT:3200).

**ECON:3360 Experimental Economics** [3 s.h.]
Experimental economics has significantly changed how economists think about many issues; techniques of experimental economics and major applications of these techniques; how to run an economic experiment; four major areas of economics that have been fundamentally changed by experimental economics include individual decision making, models of fairness and reciprocity, game theory and applications, and markets; student participation and presentations of student research projects. Prerequisites: ECON:1100.

**ECON:3380 Business and Government** [3 s.h.]
Examination of relationship between government, private sector, and citizenry; legal, regulatory, market, and civic context in which private sector functions; how business owners and entrepreneurs have shaped political and economic outcomes in the United States; central theme of exploring and understanding the nature of government policy, how policy affects businesses, and how policy affects societal welfare. Prerequisites: ECON:1100.

**ECON:3620 Economic Growth and Development** [3 s.h.]
Determinants of rising living standards; accumulation of physical and human capital; predictions of economic growth models compared to observed changes in living standards. Prerequisites: ECON:1100 and ECON:1200.

**ECON:3625 Environmental and Natural Resource Economics** [3 s.h.]
Environmental and resource use problems; efficient mechanisms and other policies for environmental protection, management of common property resources. Prerequisites: ECON:1100 and ECON:1200. Same as URP:3135.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON:3640</td>
<td>Regional and Urban Economics</td>
<td>3 s.h.</td>
<td>Theory of location and regional development; central place theory; why cities exist and trade with one another; models of land use patterns, rents; empirical tests of models; policy applications. Prerequisites: ECON:1100. Same as URP:3134.</td>
</tr>
<tr>
<td>ECON:3650</td>
<td>Policy Analysis</td>
<td>3 s.h.</td>
<td>Economic functions of government in modern economies; effects of government expenditures and taxation on allocation of resources. Prerequisites: ECON:1100.</td>
</tr>
<tr>
<td>ECON:3690</td>
<td>Sports Economics</td>
<td>3 s.h.</td>
<td>Theory and literature of economic issues in professional sports; issues such as relative advantages of large- and small-market teams, city subsidies for baseball and football stadiums, star players’ true value to their teams; ideas from introductory economics (such as demand and cost curves) combined with additional economic theory, statistical evidence, and information about particular sports. Prerequisites: ECON:1100.</td>
</tr>
<tr>
<td>ECON:3750</td>
<td>Transportation Economics</td>
<td>3 s.h.</td>
<td>Overview of transportation markets—intercity, rural, urban; transportation modes—rail, highway, air, water, pipeline, transit; issues in finance, policy, planning, management, physical distribution, and environmental, economic, and safety regulation. Recommendations: ECON:1100 and ECON:1200. Same as GEOG:3940, URP:3350.</td>
</tr>
<tr>
<td>ECON:3760</td>
<td>Health Economics</td>
<td>3 s.h.</td>
<td>Externalities and health behaviors; government influence on health behaviors; overview of health insurance and health insurance markets; health care costs; public health insurance; health insurance reforms. Prerequisites: ECON:1100.</td>
</tr>
<tr>
<td>ECON:3760</td>
<td>Behavioral Economics</td>
<td>3 s.h.</td>
<td>Behavioral economics is a relatively new field that applies insights gleaned from psychology to economics; standard economic theory assumes people are all homo economicus: we know exactly how to maximize our own utility, and we do it well; behavioral economists seek to improve microeconomic theory with more realistic assumptions about human behavior. Prerequisites: ECON:1100.</td>
</tr>
<tr>
<td>ECON:3870</td>
<td>Federal Reserve Challenge</td>
<td>1 s.h.</td>
<td>Experience what Federal Reserve economists do every day: study the real U.S. economy, make forecasts and policy recommendations, defend their views to academic and professional economists; development of analytical skills, teamwork, how to build presentations. Prerequisites: ECON:3100 and ECON:3150.</td>
</tr>
<tr>
<td>ECON:3875</td>
<td>Topics in Policy Economics</td>
<td>3 s.h.</td>
<td>Topics vary. Prerequisites: ECON:1100 and ECON:1200.</td>
</tr>
<tr>
<td>ECON:4050</td>
<td>Readings and Independent Study in Economics</td>
<td>arr.</td>
<td>Neoclassical model of international trade; imperfect competition and international trade and investment; role of trade barriers; regional trade agreements and the World Trade Organization. Prerequisites: ECON:1100 and ECON:1200.</td>
</tr>
<tr>
<td>ECON:4110</td>
<td>International Economics</td>
<td>3 s.h.</td>
<td>Neoclassical model of international trade; imperfect competition and international trade and investment; role of trade barriers; regional trade agreements and the World Trade Organization. Prerequisites: ECON:1100 and ECON:1200.</td>
</tr>
<tr>
<td>ECON:4140</td>
<td>Labor Economics</td>
<td>3 s.h.</td>
<td>Labor supply and demand; investments in human capital; compensating wage differentials; discrimination; long-term contracts; occupational choice; family decisions; unions; immigration. Prerequisites: ECON:3100.</td>
</tr>
<tr>
<td>ECON:4160</td>
<td>Public Sector Economics</td>
<td>3 s.h.</td>
<td>Economic functions of government; social welfare programs; income distribution; policies that address market failures; budgetary processes; effects of government expenditures; taxation. Prerequisites: ECON:3100 and ECON:3150.</td>
</tr>
<tr>
<td>ECON:4170</td>
<td>Monetary Economics</td>
<td>3 s.h.</td>
<td>Demand for and supply of money; money’s role in economy; empirical studies of money’s impact; problems with monetary control. Prerequisites: ECON:3100 and ECON:3150.</td>
</tr>
<tr>
<td>ECON:4180</td>
<td>Industrial Organization</td>
<td>3 s.h.</td>
<td>Market structure; effects of business practices, informational problems on market structure; appraisal of antitrust policies, government regulation of business. Prerequisites: ECON:3100.</td>
</tr>
<tr>
<td>ECON:4190</td>
<td>Mathematical Economics</td>
<td>3 s.h.</td>
<td>Mathematical structure of economic principles, problems, systems; may include constrained optimization, choice under uncertainty, general equilibrium and welfare economics, dynamical systems and control theory, game theory. Prerequisites: ECON:3100 and ECON:3150.</td>
</tr>
<tr>
<td>ECON:4200</td>
<td>Game Theory</td>
<td>3 s.h.</td>
<td>Basic concepts of game theory including dominance, backward induction, Nash equilibrium, evolutionary stability, commitment, credibility, asymmetric information, adverse selection, signaling; provides students with a working understanding of game theory; examples drawn from economics and politics. Prerequisites: ECON:3100 and ECON:3150.</td>
</tr>
<tr>
<td>ECON:4700</td>
<td>Topics in Analytical Economics</td>
<td>3 s.h.</td>
<td>Topics vary. Prerequisites: ECON:3150 and ECON:3100.</td>
</tr>
<tr>
<td>ECON:4800</td>
<td>Econometric Analysis</td>
<td>3 s.h.</td>
<td>Linear regression models; causal effects; estimation and hypothesis testing; errors in variables; simultaneous equations; panel data; instrumental variables; limited dependent variables; emphasis on interpretation, methods, application of econometric modelling, and use of statistical software. Prerequisites: STAT:3101 or STAT:3120.</td>
</tr>
<tr>
<td>ECON:4999</td>
<td>Honors Thesis in Economics</td>
<td>arr.</td>
<td>Independent research project supervised by economics faculty member; culminates in thesis required for honors in the major. Prerequisites: ECON:3100 and ECON:3150 and (ECON:3300 or ECON:4800).</td>
</tr>
<tr>
<td>ECON:5000</td>
<td>Economic Analysis I</td>
<td>3 s.h.</td>
<td>Basic metric topology, convex analysis, function spaces, measure theory and integration.</td>
</tr>
<tr>
<td>ECON:5005</td>
<td>Real Analysis for Economics</td>
<td>2 s.h.</td>
<td>Basic metric topology, convex analysis, function spaces, measure theory, and integration.</td>
</tr>
<tr>
<td>ECON:5010</td>
<td>Economic Analysis II</td>
<td>3 s.h.</td>
<td>Behavior under uncertainty, macroeconomic models; dynamic programming, asset pricing, saving, consumption.</td>
</tr>
<tr>
<td>ECON:5015</td>
<td>Dynamic Programming</td>
<td>2 s.h.</td>
<td>Finite- and infinite-horizon, discrete-time dynamic programming; discrete-time stochastic dynamic programming, including computational methods and some economic applications; continuous-time control theory.</td>
</tr>
</tbody>
</table>
ECON:5100 Microeconomics I 3 s.h.
Consumer choice theory, producer theory, choice under uncertainty, basic game theory. Offered fall semesters.

ECON:5110 Microeconomics II 3 s.h.
General equilibrium and welfare analysis, adverse selection, the principal-agent problem, social choice, mechanism design. Offered spring semesters. Prerequisites: ECON:5100.

ECON:5115 Fundamentals of Microeconomics 3 s.h.
Consumer theory, producer theory, partial equilibrium models, expected and nonexpected utility theory.

ECON:5125 Game Theory 2 s.h.
Noncooperative and cooperative games, games of perfect and imperfect information, matching games.

ECON:5135 General Equilibrium 2 s.h.
Walrasian equilibrium and its properties, welfare economics, general equilibrium and perfect competition, general equilibrium with externalities, general equilibrium under asymmetric information.

ECON:5145 Information Economics 2 s.h.
Markets with asymmetric information, allocation mechanisms, mechanism design.

ECON:5200 Macroeconomics I 3 s.h.
Economic growth, business cycles, money and inflation. Offered fall semesters.

ECON:5210 Macroeconomics II 3 s.h.
Dynamic macroeconomic models; stochastic macroeconomics; time consistency equilibrium business cycle theory. Offered spring semesters. Prerequisites: ECON:5200.

ECON:5215 Fundamentals of Macroeconomics I 2 s.h.
Infinite horizon endowment economies; neoclassical growth models and dynamic general equilibrium.

ECON:5225 Fundamentals of Macroeconomics II 2 s.h.
Real business cycle models; overlapping generations models.

ECON:5235 Fiscal Policy and Insurance in Macroeconomics 2 s.h.
Fiscal policies, optimal taxation, and endogenous growth; uncertainty and incomplete markets, limited commitment, private information.

ECON:5245 Monetary Economics and Search Theory 2 s.h.
Introduction to monetary and financial economics; search theory and applications to labor and money markets.

ECON:5800 Econometrics 3 s.h.
Statistical inference in single and multiple equation stochastic models, models with nonindependent or nonidentically distributed error structure, dynamic models; OLS, GLS, IV, ML estimation; asymptotic distribution theory; exact, asymptotic hypothesis tests. Prerequisites: STAT:4101.

ECON:5805 Statistics for Economics 3 s.h.
Probability theory, transformations and expectations, common families of distributions, multiple random variables, properties of a random sample, point estimation, hypothesis testing.

ECON:5810 Applied Econometrics 3 s.h.
Empirical problems; multiple linear regression, nonlinear regression, maximum likelihood, hazard functions, univariate and multivariate time series, flexible functional forms. Prerequisites: ECON:5800.

ECON:5815 Theoretical Econometrics I 2 s.h.
Statistical inference in single and multiple equation stochastic models, models with nonindependent or nonidentically distributed error structure, dynamic models; OLS, GLS, IV, ML estimation; asymptotic distribution theory; exact, asymptotic hypothesis tests.

ECON:5825 Theoretical Econometrics II 2 s.h.
Continuation of ECON:5815.

ECON:5855 Applied Econometrics I 2 s.h.
Empirical problems; multiple linear regression, nonlinear regression, maximum likelihood, hazard functions, univariate and multivariate time series, flexible functional forms.

ECON:5865 Applied Econometrics II 2 s.h.
Continuation of ECON:5855.

ECON:6310 Industrial Organization 3 s.h.
The firm, monopolistic competition, oligopoly and workable competition; industrial organization, nature of equilibrium under uncertainty. Prerequisites: ECON:5110.

ECON:6320 Labor Economics 3 s.h.
Problems and models, including intertemporal models of labor markets; uncertainty and labor market activity; retirement decisions, economic theories of fertility; economics of discrimination; job search models; economic models of unions; bargaining and strikes, public sector labor markets; determinants of income distribution; emphasis on empirical verification of theory. Prerequisites: ECON:5110 and (ECON:4800 or ECON:5800).

ECON:6350 Structural Methods in Econometrics 2 s.h.
Introduction to structural econometric approaches which can be applied in labor economics, industrial organization, and elsewhere; theoretical frameworks used in this literature; identifying assumptions needed for model estimation and validation techniques; methods used for the estimation of structural models, including Maximum Likelihood, Method of Moments and simulation-based methods.

ECON:6420 Macroeconomics III 3 s.h.
Current research in macroeconomics; development of research topics with emphasis on theoretical and empirical analysis. Prerequisites: ECON:5110 and ECON:5800.

ECON:6500 International Trade Theory 3 s.h.
The theory of international trade, including basic models of international trade; capital and labor mobility and trade; protection of international trade; the political economy of international trade; empirical applications of international trade.

ECON:6900 Contemporary Topics in Economics 3 s.h.
Topics not offered in other courses.

ECON:7000 Seminar in Economic Theory arr.
ECON:7010 Seminar in Economic Theory II arr.

ECON:7020 Seminar in Economics I 2 s.h.
ECON:7030 Seminar in Economics II 2 s.h.
ECON:7040 Seminar in Economics III 2 s.h.
ECON:7050 Seminar in Economics IV 2 s.h.

ECON:7870 Workshop in Microeconomics 1 s.h.

ECON:7880 Workshop in Macro and Monetary Economics 1 s.h.

ECON:7950 Readings in Economics arr.