**ECO - ECONOMICS**

**ECO 1000 (SS) Survey of Economics Cr. 4**
Scope of economics and the task of the economist in modern society; the market economy, its evolution and development; non-market economies; economic problems and prospects in the contemporary world. Not for ECO major or minor credit. Offered Every Term.

**ECO 2010 (SS) Principles of Microeconomics Cr. 4**
Supply, demand, price at the level of the firm and industry; business institutions and their operation; determinants of wage and salary levels, interest rates, rent, profits, income distribution; public policy in relation to business and labor. Offered Every Term.

**ECO 2020 (SS) Principles of Macroeconomics Cr. 4**
Determination of national income, consumption and saving, and investment; money, banking and the Federal Reserve; inflation and unemployment; monetary and fiscal policy; economic growth and productivity; the international sector. Offered Every Term.

**ECO 3990 Directed Study Cr. 1**
For the student who shows evidence of ability and interest in economic study and who desires opportunity for advanced reading in a special field. Arrange with advisor. Offered Every Term.

**Prerequisites:** ([ECO 1000 with a minimum grade of B] OR [ECO 1000 with a minimum grade of B] OR [ECO 1000 with a minimum grade of B])

**Restriction(s):** Enrollment limited to students with a class of Senior; enrollment is limited to students in a Bachelor of Arts degree.

**Repeatable for 2 Credits**

**ECO 4991 Research in Economics Cr. 3-12**
Economic research on an appropriate topic of the student’s choice, conducted under faculty supervision. Does not count toward 32-credit requirement for the ECO major. Offered Every Term.

**Prerequisites:** ([ECO 1000 with a minimum grade of B] OR [ECO 1000 with a minimum grade of B] OR [ECO 1000 with a minimum grade of B])

**Restriction(s):** Enrollment limited to students with a class of Senior; enrollment is limited to students in a Bachelor of Arts degree.

**Repeatable for 12 Credits**

**ECO 4995 Venture Capital, Entrepreneurship and Impact Investing Cr. 1**
Provides an insider’s look at the venture capital industry, entrepreneurship, and social impact investing. Presents a broad overview of the types of background knowledge needed to launch a company, engage in social impact investing, and/or to become a venture capitalist. Participation in this course will help students develop their analytical and decision making skills as well as their presentation skills. The final class project will be an investor pitch contest presented during the last week of class. Offered Yearly.

**ECO 4997 Senior Honors Research Cr. 4**
Individually arranged meetings with faculty member to discuss research methodology and readings in areas of research selected by instructor. A senior honors essay of a length proportionate to the selected topic will be required. Offered Every Term.

**Restriction(s):** Enrollment limited to students with a class of Senior; enrollment is limited to students with a major in Economics Honors; enrollment limited to students in a Bachelor of Arts degree.

**ECO 5000 Intermediate Microeconomics Cr. 4**
Theory of the firm and consumer. Analysis of a price system as a means to efficient allocation of productive resources. Offered for undergraduate credit only. Offered Every Term.

**Prerequisites:** ([ECO 2010 with a minimum grade of C] AND ([MAT 1500 with a minimum grade of C])

**ECO 5020 Fundamentals of Economic Analysis 1 Cr. 4**
This course assumes good knowledge of first semester calculus, and teaches additional mathematics necessary for Ph.D. study in economics, and (to a lesser extent) teaches some economic implications; course content includes: matrices, vectors and linear algebra; partial and total derivatives; scalar and vector functions; Jacobian derivative matrices and determinants; implicit function theorem; derivatives of implicit functions with one or more endogenous variables; unconstrained maximization with two or more variables; Lagrangi ans and constrained maximization; envelope theorem; differential and difference equations, and systems of differential and difference equations. Offered for undergraduate credit only. Offered Fall.

**Prerequisites:** ([ECO 5000 with a minimum grade of C] AND (MAT 2010 with a minimum grade of C])

**Restriction(s):** Enrollment limited to Undergraduate level students.

**ECO 5030 Microeconomic Theory Cr. 4**

**Prerequisites:** ([MAT 2010 with a minimum grade of C] AND (MAT 5010 with a minimum grade of C) OR ([MAT 5010 with a minimum grade of C] AND (MAT 2020 with a minimum grade of C) OR ([ECO 5000 with a minimum grade of C) AND ([ECO 5020 with a minimum grade of C])

**Restriction(s):** Enrollment limited to Undergraduate level students.

**ECO 5050 Intermediate Macroeconomics Cr. 4**
Theory of national income determination. National output and income, saving and capital formation. Offered for undergraduate credit only. Offered Every Term.

**Prerequisites:** ([MAT 1500 with a minimum grade of C] AND (ECO 2020 with a minimum grade of C))

**Restriction(s):** Enrollment limited to Undergraduate level students.

**ECO 5100 Introductory Statistics and Econometrics Cr. 4**
Elementary probability theory, discrete and continuous probability distribution, sampling distribution, interval estimation, hypothesis testing, and estimation and inference in simple and multiple regression models. Offered for undergraduate credit only. Offered Every Term.

**Prerequisites:** ([ECO 2010 with a minimum grade of C] AND ([ECO 2020 with a minimum grade of C] AND (MAT 1500 with a minimum grade of C))

**Restriction(s):** Enrollment limited to Undergraduate level students.

**ECO 5200 Regulation and Regulated Industries Cr. 4**
Transportation economics. Regulation of transportation as an example of public control of business; the rationale for having public regulation, and the analysis of its economic effects; reform of the scope and practice of regulation; public ownership; regulation of occupational and product safety standards and environmental standards. Offered for undergraduate credit only. Offered Yearly.

**Prerequisites:** ([ECO 2010 with a minimum grade of C] AND [ECO 5000 with a minimum grade of C])

**Restriction(s):** Enrollment is limited to Undergraduate level students.
ECO 5210 Market Power and Economic Welfare Cr. 4
Monopoly, oligopoly, and competition in U.S. industry; sources of market power and their effect on prices, profits, and technological progress. Case studies. Selected topics in antitrust policy. Offered for undergraduate credit only. Offered Yearly.
Prerequisites: ([MAT 1500 with a minimum grade of C] OR [MAT 1800 with a minimum grade of C]) OR [MAT 2010 with a minimum grade of C]) AND ([ECO 2010 with a minimum grade of C]) AND ([ECO 5000 with a minimum grade of C])
Restriction(s): Enrollment is limited to Undergraduate level students.

ECO 5230 Environmental Economics Cr. 4
Externalities as the cause of environmental degradation and climate change. Externality in turn results from the failure of the market to develop prices that reflect the full global cost of production and consumption. The course also pays attention to normative issues. The population over which the normative issues are defined may include animals, plants and inanimate objects. Behavioral economics, in particular, will be brought to bear on the discussion throughout the course. Offered Fall, Winter.
Prerequisites: ([ECO 1000 with a minimum grade of D-] OR [ECO 2010 with a minimum grade of D-])
Restriction(s): Enrollment is limited to Undergraduate level students.

ECO 5250 Economic Analysis of Law Cr. 4
Economic analysis of property rights, torts, contracts, criminal law, the law of business organizations and financial markets, and the law of taxation. Economic analysis of litigation; the use of economics and statistics in litigation. Offered for undergraduate credit only. Offered Yearly.
Prerequisites: ([ECO 2010 with a minimum grade of C])
Restriction(s): Enrollment is limited to Undergraduate level students.

ECO 5270 Games of Strategy Cr. 4
Game theory studies how individuals, groups and firms make their decisions strategically when their actions affect each other. Introductory course with emphasis on applications to firms and markets. Standard concepts such as games with sequential moves, simultaneous moves, pure and mixed strategies, uncertainty, and repetition. Special topics include bargaining, strategic innovation, cooperative pricing, contract designs, incentive mechanisms, bidding, and auctions. Students do not need to know calculus to follow the lectures. Offered for undergraduate credit only. Offered Yearly.
Prerequisites: ([MAT 1500 with a minimum grade of C] OR [MAT 1800 with a minimum grade of C]) OR [MAT 2010 with a minimum grade of C]) AND ([ECO 2010 with a minimum grade of C]) AND ([ECO 5000 with a minimum grade of C])
Restriction(s): Enrollment is limited to Undergraduate level students.

ECO 5300 International Trade Cr. 4
Factors in international relations; patterns of international specialization; balance of international payments; foreign exchange; commercial policy of United States and other countries; foreign investment and economic development; international economic cooperation. Offered for undergraduate credit only. Offered Fall.
Prerequisites: ([ECO 5000 with a minimum grade of C]) AND ([ECO 2010 with a minimum grade of C])
Restriction(s): Enrollment is limited to Undergraduate level students.

ECO 5310 International Finance Cr. 4
Major policy issues in the field of international finance with emphasis on open economy macroeconomics. Topics include the balance of payments and the foreign exchange market; monetary and fiscal policies in open economies; the floating exchange rate system; international financial markets; and European monetary integration. Offered for undergraduate credit only. Offered Winter.
Prerequisites: ([MAT 1500 with a minimum grade of C] OR [MAT 1800 with a minimum grade of C]) AND ([ECO 2020 with a minimum grade of C]) AND ([ECO 5000 with a minimum grade of C])
Restriction(s): Enrollment is limited to Undergraduate level students.

ECO 5400 Labor Economics Cr. 4
Economics of labor markets. Determinants of earnings and methods of compensation, labor supply and demand, effects of taxes and subsidies on labor supply, choices of occupation and level of schooling, promotion and turnover, employment discrimination, economics of crime and punishment, regulation of professions, unions. Offered for undergraduate credit only. Offered Fall, Winter.
Prerequisites: ([ECO 2010 with a minimum grade of C])
Restriction(s): Enrollment is limited to Undergraduate level students.

ECO 5410 Economics of Race and Gender Cr. 4
Theory and empirical evidence of race and gender differentials in the labor market. Topics include the difference in occupations and earnings, discrimination, poverty, and public policies. Offered for undergraduate credit only. Offered Winter.
Prerequisites: ([ECO 2010 with a minimum grade of C])
Restriction(s): Enrollment is limited to Undergraduate level students.

ECO 5470 Economics of an Aging Society Cr. 4
Economic implications of aging and retirement; public policy issues related to aging, including health care, long term care, public pensions (Social Security), private pensions, savings behavior, income maintenance, Medicare, other welfare problems. Offered for undergraduate credit only. Offered Yearly.
Prerequisites: ([MAT 1500 with a minimum grade of C] OR [MAT 1800 with a minimum grade of C]) OR [MAT 2010 with a minimum grade of C]) AND ([ECO 2010 with a minimum grade of C]) AND ([ECO 5000 with a minimum grade of C])
Restriction(s): Enrollment is limited to Undergraduate level students.

ECO 5480 Economics of Work Cr. 3
Theoretical and empirical treatment of: labor market characteristics; labor demand and supply; issues of race, gender, and age; compensation and pay; issues of health and productivity; bargaining processes and the effects of unions; unemployment and job search; globalization. No economics major or minor credit. Offered Yearly.
Prerequisites: ([ECO 2010 with a minimum grade of C]) OR [ECO 2020 with a minimum grade of C] OR [ECO 1000 with a minimum grade of C])
Restriction(s): Enrollment limited to students in the BA in Labor Studies program; enrollment is limited to Undergraduate level students.

ECO 5490 American Labor History Cr. 4
Development of the American labor movement; its behavior in the contemporary scene. Labor’s experiments with social, political, legal, and economic institutions. Comparisons with foreign labor movements. Offered for undergraduate credit only. Offered Biannually.
Prerequisites: ([ECO 2010 with a minimum grade of C])
Restriction(s): Enrollment is limited to Undergraduate level students.
Equivalent: HIS 5290
ECO 5500 Public Finance Cr. 4
Role of government in a market economy: sources of market failure; public goods and externalities; principles of taxation and expenditures; tax incidence; federal tax structure; selected government expenditure programs. Offered for undergraduate credit only. Offered Fall, Spring/Summer.
Prerequisites: ([ECO 2010 with a minimum grade of C])
Restriction(s): Enrollment is limited to Undergraduate level students.

ECO 5520 State and Local Public Finance Cr. 4
Theory and practice of state and local government taxation and expenditure. Attention devoted to State of Michigan and municipalities in Detroit metropolitan area. Topics include: government organization, voting and mobility models, property and sales taxes, user charges, grants, education expenditure, and economic development. Offered for undergraduate credit only. Offered Yearly.
Prerequisites: ([ECO 2010 with a minimum grade of C]) AND ([MAT 1500 with a minimum grade of C] OR [MAT 1800 with a minimum grade of C]) AND ([ECO 2010 with a minimum grade of C])
Restriction(s): Enrollment is limited to Undergraduate level students.

ECO 5550 Economics of Health Care Cr. 4
Allocation of health care resources, with respect to demand and supply of health care. Role of hospitals, physicians, and health insurance; market imperfections and their role in the economics of health care. Offered for undergraduate credit only. Offered Yearly.
Prerequisites: ([ECO 2010 with a minimum grade of C])
Restriction(s): Enrollment is limited to Undergraduate level students.

ECO 5600 Introduction to Development Economics Cr. 4
National poverty and economic growth viewed from a historical and theoretical perspective; particular emphasis on national and international policies. Offered for undergraduate credit only. Offered Yearly.
Prerequisites: ([ECO 2010 with a minimum grade of C])
Restriction(s): Enrollment is limited to Undergraduate level students.

ECO 5700 Money and Banking Cr. 4
Role of the Federal Reserve System, the commercial banks, and the non-bank public (including financial intermediaries) in determining the money supply; central banking and techniques of monetary control; indicators and targets of monetary policy; and how money affects economic activity. Offered Fall, Winter.
Prerequisites: ([MAT 1500 with a minimum grade of C] OR [MAT 1800 with a minimum grade of C]) AND ([ECO 2020 with a minimum grade of C]) AND ([ECO 5050 with a minimum grade of C])
Restriction(s): Enrollment is limited to Undergraduate level students.

ECO 5720 Financial Economics Cr. 4
Fundamentals of investments: investment and financial markets, theoretical models of investment theory including efficient market hypothesis (EMH) and capital asset pricing model (CAPM); characteristics and analysis of stocks, bonds, and portfolios; equity evaluation through financial statements, industry analysis, and macroeconomic analysis; and advanced topics in either derivative assets (futures and options) or international investments. Offered for undergraduate credit only. Offered Winter.
Prerequisites: ([ECO 2010 with a minimum grade of C]) AND ([ECO 2020 with a minimum grade of C]) AND ([ECO 5050 with a minimum grade of C]) AND ([MAT 1500 with a minimum grade of C])
Restriction(s): Enrollment is limited to Undergraduate level students.

ECO 5800 Urban and Regional Economics Cr. 4
Introduction to the economic foundations of urban problems; land use, housing, poverty, transportation, local public finance; regional industry mix, income, growth and development; the national system of cities and location of firms. Offered for undergraduate credit only. Offered Yearly.
Prerequisites: ([ECO 2010 with a minimum grade of C])
Restriction(s): Enrollment is limited to Undergraduate level students. Equivalent: UP 5820

ECO 5993 (WI) Writing Intensive Course in Economics Cr. 0
Disciplinary writing assignments under the direction of a faculty member. Satisfies the University General Education Writing Intensive Course in the Major requirement. Required for all majors. Offered Every Term.
Prerequisites: ([ECO 5000 with a minimum grade of C]) OR ([ECO 5050 with a minimum grade of C])
Restriction(s): Enrollment is limited to students with a class of Unranked Grad, Junior or Senior.

ECO 6000 Price and Allocation Theory Cr. 4
Introduction to the theory of consumer choice and the theory of production, and other selected topics. Primarily for M.A. students and for Ph.D. students who want to review. Offered Fall.
Restriction(s): Enrollment limited to students with a class of Unranked Grad, Junior or Senior.

ECO 6050 Macroeconomics Cr. 4
Determination of national income, unemployment and interest rates; theories of inflation; effectiveness of macroeconomic public policies. Primarily for M.A. students and for Ph.D. students who want to review. No credit after ECO 7050. Offered Winter.
Restriction(s): Enrollment is limited to Graduate level students.

ECO 6100 Introduction to Econometrics Cr. 4
Basic statistics, basic probability, hypothesis testing, and bivariate and multivariate regression analysis. Estimators studied are least squares, maximum likelihood and generalized least squares. Various model specification issues addressed: omitted variables, extraneous variables, category variables, multicollinearity, heteroscedasticity, and autocorrelation. Offered Fall.

ECO 6200 Advanced Regulation and Regulated Industries Cr. 4
Transportation economics. Regulation of transportation as an example of public control of business; the rationale for having public regulation, and the analysis of its economic effects; reform of the scope and practice of regulation; public ownership; regulation of occupational and product safety standards and environmental standards. No credit after ECO 5200. Offered for graduate credit only. Offered Yearly.
Restriction(s): Enrollment is limited to Graduate level students.

ECO 6210 Advanced Market Power and Economic Welfare Cr. 4
Monopoly, oligopoly, and competition in U.S. industry; sources of market power and their effect on prices, profits, and technological progress. Case studies. Selected topics in antitrust policy. No credit after ECO 5210. Offered for graduate credit only. Offered Yearly.
Restriction(s): Enrollment is limited to Graduate level students.

ECO 6250 Advanced Economic Analysis of Law Cr. 4
Economic analysis of property rights, torts, contracts, criminal law, the law of business organizations and financial markets, and the law of taxation. Economic analysis of litigation; the use of economics and statistics in litigation. Advanced mathematical analysis of selected topics. No credit after ECO 5250. Offered for graduate credit only. Offered Yearly.
Restriction(s): Enrollment is limited to Graduate level students.
ECO 6300 Advanced International Trade Cr. 4
Factors in international relations; patterns of international specialization; balance of international payments; foreign exchange; commercial policy of United States and other countries; foreign investment and economic development; international economic cooperation. Advanced mathematical analysis of selected topics. No credit after ECO 5300. Offered for graduate credit only. Offered Yearly.
Restriction(s): Enrollment is limited to Graduate level students.

ECO 6310 Advanced International Finance Cr. 4
Major policy issues in the field of international finance with emphasis on open economy macroeconomics. Topics include the balance of payments and the foreign exchange market; monetary and fiscal policies in open economies; the floating exchange rate system; international financial markets; and European monetary integration. Advanced mathematical analysis of selected topics. No credit after ECO 5310. Offered for graduate credit only. Offered Yearly.
Prerequisite: ECO 2020 with a minimum grade of C and ECO 5050 with a minimum grade of C
Restriction(s): Enrollment is limited to Graduate level students.

ECO 6400 Advanced Labor Economics Cr. 4
Economics of labor markets. Determinants of earnings and methods of compensation, labor supply and demand, effects of taxes and subsidies on labor supply, choices of occupation and level of schooling, promotion and turnover, employment discrimination, economics of crime and punishment, regulation of professions, unions. Advanced mathematical analysis of selected topics. No credit after ECO 5400. Offered for graduate credit only. Offered Yearly.
Restriction(s): Enrollment is limited to Graduate level students.

ECO 6415 Advanced Economics of Race and Gender Cr. 4
Theory and empirical evidence of race and gender differentials in the labor market. Topics include the difference in occupations and earnings, discrimination, poverty, and public policies. Advanced mathematical analysis of selected topics. No credit after ECO 5410. Offered for graduate credit only. Offered Yearly.
Restriction(s): Enrollment is limited to Graduate level students.

ECO 6420 Labor Relations and Public Policy Cr. 3
Overview of labor force trends; U.S. unionism; management of labor relations; collective bargaining: procedure and substance; bargaining power in the private and public sectors. Comparative trends and principles in industrial relations systems of other societies also examined. Offered for graduate credit only. Offered Fall, Spring/Summer.
Restriction(s): Enrollment is limited to Graduate level students.

ECO 6455 Discrimination and Fair Housing Cr. 3
Multidisciplinary investigation into the nature, motivations, consequences, and legal/public policy implications of racial/ethnic discrimination in housing and related markets in U.S. metropolitan areas. Offered Biannually.
Equivalent: AFS 6455, PS 6455, SOC 6455, UP 6455, US 6455

ECO 6480 Advanced Economics of Work Cr. 3
Theoretical and empirical treatment of: labor market characteristics; labor demand and supply; issues of race, gender, and age; compensation and pay; issues of health and productivity; bargaining processes and the effects of unions; unemployment and job search; globalization. Offered for graduate credit only. Offered Yearly.
Restriction(s): Enrollment limited to students in the MA in Employ & Labor Relations program; enrollment is limited to Graduate level students.

ECO 6510 Advanced Public Finance Cr. 4
Role of government in a market economy: sources of market failure—public goods and externalities; principles of taxation and expenditures; tax incidence; federal tax structure; selected government expenditure programs. Advanced mathematical analysis of selected topics. No credit after ECO 5500. Offered for graduate credit only. Offered Yearly.
Restriction(s): Enrollment is limited to Graduate level students.

ECO 6520 Advanced State and Local Public Finance Cr. 4
Theory and practice of state and local government taxation and expenditure. Attention devoted to State of Michigan and municipalities in Detroit metropolitan area. Topics include: government organization, voting and mobility models, property and sales taxes, user charges, grants, education expenditure, and economic development. Advanced mathematical analysis of selected topics. No credit after ECO 5520. Offered for graduate credit only. Offered Yearly.
Restriction(s): Enrollment is limited to Graduate level students.

ECO 6550 Advanced Economics of Health Care Cr. 4
Allocation of health care resources, with respect to demand and supply of health care. Roles of hospitals, physicians, and health insurance; market imperfections and their role in the economics of health care. Advanced mathematical analysis of selected topics. No credit after ECO 5550. Offered for graduate credit only. Offered Yearly.
Restriction(s): Enrollment is limited to Graduate level students.

ECO 6600 Advanced Development Economics Cr. 4
National poverty and economic growth viewed from a historical and theoretical perspective; particular emphasis on national and international policies. Advanced mathematical analysis of selected topics. No credit after ECO 5600. Offered for graduate credit only. Offered Yearly.
Restriction(s): Enrollment is limited to Graduate level students.

ECO 6650 Regional, State, and Urban Economic Development: Policy and Administration Cr. 3
Examination of regional, state, and local economic development theory, analysis, policy and administration. Offered for graduate credit only. Offered Biannually.
Restriction(s): Enrollment is limited to Graduate level students.

ECO 6655 Regional, State, and Urban Economic Development: Policy and Administration Cr. 3
Examination of regional, state, and local economic development theory, analysis, policy and administration. Offered for graduate credit only. Offered Biannually.
Restriction(s): Enrollment is limited to Graduate level students.

ECO 6700 Advanced Money and Banking Cr. 4
Role of the Federal Reserve System, the commercial banks, and the non-bank public (including financial intermediaries) in determining the money supply; central banking and techniques of monetary control; indicators and targets of monetary policy; and how money affects economic activity. Advanced mathematical analysis of selected topics. Offered for graduate credit only. Offered Yearly.
Prerequisite: ECO 2020 with a minimum grade of C and ECO 5050 with a minimum grade of C
Restriction(s): Enrollment is limited to Graduate level students.

ECO 6800 Advanced Urban and Regional Economics Cr. 4
Introduction to the economic foundations of urban problems; land use, housing, poverty, transportation, local public finance; regional industry mix, income, growth and development; the national system of cities and location of firms. Advanced mathematical analysis of selected topics. No credit after ECO 5800. Offered for graduate credit only. Offered Yearly.
Restriction(s): Enrollment is limited to Graduate level students.
ECO 7000 Microeconomic Theory I Cr. 4
Theory of choice; theory of cost and production; theory of the competitive firm. Price and output in non-competitive markets. General competitive equilibrium and welfare economics. Offered Winter.
Prerequisite: ECO 7020 with a minimum grade of C
Restriction(s): Enrollment is limited to students with a major in Economics; enrollment is limited to Graduate level students; enrollment limited to students in a Doctor of Philosophy degree.

ECO 7010 Microeconomic Theory II Cr. 4
Continuation of ECO 7000. Includes general equilibrium analysis and game theory. Offered Fall.
Prerequisite: ECO 7000 with a minimum grade of C
Restriction(s): Enrollment is limited to students with a major in Economics; enrollment is limited to Graduate level students; enrollment limited to students in a Doctor of Philosophy degree.

ECO 7020 Fundamentals of Economic Analysis I Cr. 4
This course assumes sound knowledge of first and second semester calculus, and teaches additional mathematics necessary for Ph.D. study in economics, and covers additional mathematics necessary for Ph.D. study in mathematics, and to a lesser extent some economic implications. Course content includes: matrices, vectors and linear algebra; partial and total derivatives; scalar and vector functions; Jacobian derivative matrices and determinants; implicit function theorem; derivatives of implicit functions with one or more endogenous variables; unconstrained maximization with two or more variables; Lagrangians and constrained maximization; envelope theorem; differential and difference equations, and systems of differential and difference equations. Offered for graduate credit only. Offered Fall.
Restriction(s): Enrollment is limited to students with a major in Economics; enrollment is limited to Graduate level students; enrollment limited to students in a Doctor of Philosophy degree.

ECO 7021 Fundamentals of Economic Analysis II Cr. 4
Mathematical methods specific to macroeconomics and econometrics. Applications of matrix operations, distribution functions, estimation methods, difference equations, differential equations, inter-temporal optimization, calculus of variations, control theory. Offered Fall.
Corequisite: ECO 7020
Restriction(s): Enrollment is limited to students with a major in Economics; enrollment is limited to Graduate level students; enrollment limited to students in a Doctor of Philosophy degree.

ECO 7050 Macroeconomic Theory I Cr. 4
Determination of national income, employment, interest rates and the price level; static and dynamic models; cycle and growth models; classic, Keynesian and neo-Keynesian models. Offered Winter.
Restriction(s): Enrollment is limited to students with a major in Economics; enrollment is limited to Graduate level students; enrollment limited to students in a Doctor of Philosophy degree.

ECO 7060 Macroeconomic Theory II Cr. 4
Prerequisite: ECO 7050 with a minimum grade of C
Restriction(s): Enrollment is limited to students with a major in Economics; enrollment is limited to Graduate level students; enrollment limited to students in a Doctor of Philosophy degree.

ECO 7100 Econometrics I Cr. 4
Probability and statistics: moment generating functions, common families of statistical distributions, multiple random variables and properties of a random sample. Estimation and hypothesis testing: method of moments, generalized method of moments, maximum likelihood estimators, instrumental variable estimators, Bayes estimators, likelihood ratio tests, finite sample properties and asymptotic properties of OLS. Offered Fall.
Prerequisite: ECO 6100 with a minimum grade of C and ECO 7020 with a minimum grade of C
Restriction(s): Enrollment is limited to students with a major in Economics; enrollment is limited to Graduate level students; enrollment limited to students in a Doctor of Philosophy degree.

ECO 7110 Econometrics II Cr. 4
Modeling and estimation: generalized least squares, panel data models (fixed effects and random effects), system of equations (endogeneity, identification), models with discrete dependent variables (probit, logit), models with limited dependent variables (truncation, censoring), stationary time-series (ARMA), vector-autoregression (VAR, VMA), non-stationary time-series (unit roots, cointegration). Offered Winter.
Prerequisite: ECO 7100 with a minimum grade of C
Restriction(s): Enrollment is limited to students with a major in Economics; enrollment is limited to Graduate level students; enrollment limited to students in a Doctor of Philosophy degree.

ECO 7120 Econometrics III Cr. 4
Advanced economic techniques in microeconomics and macroeconomics. In the first half of the course, emphasis on specification, estimation, interpretation, and testing of microeconomic models. The second half will cover statistical models for the analysis of economic time series data, with applications in macroeconomics and finance. Offered Yearly.
Prerequisite: ECO 7100 with a minimum grade of C and ECO 7110 with a minimum grade of C
Restriction(s): Enrollment is limited to students with a major in Economics; enrollment is limited to Graduate level students; enrollment limited to students in a Doctor of Philosophy degree.

ECO 7200 Industrial Organization I Cr. 4
Theories of competition and market power. Topics include concentration, scale economies, product differentiation, entry barriers, collusion, mergers, price discrimination, information, and advertising. Offered Biannually.
Prerequisite: ECO 6000 with a minimum grade of C
Restriction(s): Enrollment is limited to students with a major in Economics; enrollment is limited to Graduate level students; enrollment limited to students in a Doctor of Philosophy degree.

ECO 7210 Industrial Organization II Cr. 4
Prerequisite: ECO 6000 with a minimum grade of C
Restriction(s): Enrollment is limited to students with a major in Economics; enrollment is limited to Graduate level students; enrollment limited to students in a Doctor of Philosophy degree.
ECO 7300 International Trade Theory Cr. 4
Classical and modern models of the determinants of international trade and their empirical verification; impact of trade on earnings of production factors; economic analysis of various trade policy instruments; strategic trade policy; economic analysis of international trade rules and institutions; political economy of trade policy. Offered Biannually.
Prerequisite: ECO 6000 with a minimum grade of C
Restriction(s): Enrollment is limited to students with a major in Economics; enrollment is limited to Graduate level students; enrollment limited to students in a Doctor of Philosophy degree.

ECO 7310 International Monetary Theory Cr. 4
Foreign exchange rate and balance of payments adjustment theory under alternative exchange rate regimes; stabilization policies in open economies; financial capital movements; monetary unions; economic growth and the balance of payments. Offered Biannually.
Prerequisite: ECO 6050 with a minimum grade of C
Restriction(s): Enrollment is limited to students with a major in Economics; enrollment is limited to Graduate level students; enrollment limited to students in a Doctor of Philosophy degree.

ECO 7400 Labor Economics and Human Resources Cr. 4
Labor force participation and composition; factors affecting wage levels (money and real) and wage structure. Theoretical and empirical analyses of occupational choice, labor mobility, promotion, turnover, unemployment, the effects of taxation, retirement and income inequality. Offered Biannually.
Prerequisite: ECO 6000 with a minimum grade of C
Restriction(s): Enrollment is limited to students with a major in Economics; enrollment is limited to Graduate level students; enrollment limited to students in a Doctor of Philosophy degree.

ECO 7410 Economics of Human Resources Cr. 4
Theoretical and empirical analyses of labor supply and family allocation of time; the return to education; role of general and firm-specific human capital and job mobility in wage growth over a career; race and gender differences in the labor market; intergenerational transfers and mobility. Offered Biannually.
Prerequisite: ECO 6000 with a minimum grade of C and ECO 6100 with a minimum grade of C
Restriction(s): Enrollment is limited to students with a major in Economics; enrollment is limited to Graduate level students; enrollment limited to students in a Doctor of Philosophy degree.

ECO 7550 Economics of Health Care I Cr. 4
Basic introduction to health care economics including allocation of health care resources, economics of information, and the role of advertising. No credit after ECO 5550. Offered Biannually (Winter).
Restriction(s): Enrollment is limited to students with a major in Economics; enrollment is limited to Graduate level students; enrollment limited to students in a Doctor of Philosophy degree.

ECO 7560 Economics of Health Care II Cr. 4
Particular roles of hospitals, physicians, and health insurance in the economy. Analysis of government policies. No credit after ECO 5550. Offered Biannually.
Restriction(s): Enrollment is limited to students with a major in Economics; enrollment is limited to Graduate level students; enrollment limited to students in a Doctor of Philosophy degree.

ECO 7700 Advanced Macroeconomics I Cr. 4
For Ph.D. students who wish to take macroeconomics as a field of concentration. Topics vary, and may include: economic growth, vector autoregressions, cointegration, fractional integration, breaks in economic time series, efficiency wage theories of labor market, contracting, incomplete markets and business cycles, buffer stock models of saving. Time series methods applied to economic time series such as real and nominal exchange rates and cross-country macroeconomic data. Offered Biannually.
Prerequisite: ECO 7050 and ECO 7060
Restriction(s): Enrollment is limited to students with a major in Economics; enrollment is limited to Graduate level students; enrollment limited to students in a Doctor of Philosophy degree.

ECO 7710 Advanced Macroeconomics II Cr. 4
Continuation of ECO 7700. Offered Biannually.
Prerequisite: ECO 7050 and ECO 7060
Restriction(s): Enrollment is limited to students with a major in Economics; enrollment is limited to Graduate level students; enrollment limited to students in a Doctor of Philosophy degree.

ECO 7996 Research in Economics Cr. 2-8
Open to qualified students who desire opportunity for research and directed study. May be conducted as seminar. Offered Every Term.
Restriction(s): Enrollment is limited to students with a major in Economics; enrollment is limited to Graduate level students; enrollment limited to students in a Doctor of Philosophy degree.
Repeatable for 16 Credits
ECO 9990 Pre-Doctoral Candidacy Research Cr. 1-8
Research in preparation for doctoral dissertation. Offered Every Term.
Restriction(s): Enrollment is limited to Graduate level students.
Repeatable for 12 Credits
ECO 9991 Doctoral Candidate Status I: Dissertation Research and Direction Cr. 7.5
Offered Every Term.
Restriction(s): Enrollment is limited to Graduate level students.
ECO 9992 Doctoral Candidate Status II: Dissertation Research and Direction Cr. 7.5
Offered Every Term.
Prerequisite: ECO 9991 with a minimum grade of S
Restriction(s): Enrollment is limited to Graduate level students.
ECO 9993 Doctoral Candidate Status III: Dissertation Research and Direction Cr. 7.5
Offered Every Term.
Prerequisite: ECO 9992 with a minimum grade of S
Restriction(s): Enrollment is limited to Graduate level students.
ECO 9994 Doctoral Candidate Status IV: Dissertation Research and Direction Cr. 7.5
Offered Every Term.
Prerequisite: ECO 9993 with a minimum grade of S
Restriction(s): Enrollment is limited to Graduate level students.
ECO 9995 Candidate Maintenance Status: Doctoral Dissertation Research and Direction Cr. 0
Offered Every Term.
Restriction(s): Enrollment is limited to Graduate level students.
Course Material Fees: $348.67
Repeatable for 0 Credits