

ECONOMICS (ECON)

Economics Courses

ECON 100 Introductory Economics

3 cr. Undergraduate.

A one semester survey of current national and international economic problems. Useful as preparation for ECON 103 and ECON 104. Not required of economics majors.

Prerequisites: none.

Course Rules: Not open for cr to students who have cr in ECON 103 & ECON 104.

General Education Requirements: SS

Last Taught: Spring 2025, Fall 2024, Spring 2024, Fall 2023.

Current Offerings: <https://catalog.uwm.edu/course-search/>

ECON 103 Principles of Microeconomics

3 cr. Undergraduate.

Economic reasoning; price determination, specialization, and efficiency. Applications include international trade, antitrust, environmental protection, highway congestion.

Prerequisites: none.

General Education Requirements: SS

Last Taught: Summer 2025, Spring 2025, Fall 2024, Summer 2024.

Current Offerings: <https://catalog.uwm.edu/course-search/>

ECON 104 Principles of Macroeconomics

3 cr. Undergraduate.

Composition of national income, interrelationship of sectors; determination of national income and productivity; relationship between national income, inflation, money, interest rates; U.S. global economies interaction.

Prerequisites: none.

General Education Requirements: SS

Last Taught: Summer 2025, Spring 2025, Fall 2024, Summer 2024.

Current Offerings: <https://catalog.uwm.edu/course-search/>

ECON 110 Economics of Personal Finance

1 cr. Undergraduate.

Economics of personal financial management; development of successful financial skills; activity-based course with assignments emphasizing students' individual situations.

Prerequisites: none.

Course Rules: No cr for students who have cr in Econ 258 w/same topic.

Last Taught: Summer 2025, Spring 2025, Fall 2024, Summer 2024.

Current Offerings: <https://catalog.uwm.edu/course-search/>

ECON 193 First-Year Seminar:

3 cr. Undergraduate.

The specific topics are announced in the Schedule of Classes each time the class is offered.

Prerequisites: none.

Course Rules: Open only to freshmen. Students may earn cr in just one L&S First-Year Sem (course numbers 192, 193, 194).

General Education Requirements: SS

Last Taught: Fall 2024, Fall 2023, Fall 2022, Fall 2020.

Current Offerings: <https://catalog.uwm.edu/course-search/>

ECON 199 Independent Study

1-3 cr. Undergraduate.

For further information, consult dept chair.

Prerequisites: 2.0 GPA; consent of instructor, department chair, and Assistant Dean for Student Academic Services.

Course Rules: May be retaken to 6 cr max.

Last Taught: Spring 2018, Fall 2016, Spring 2008, Fall 2005.

Current Offerings: <https://catalog.uwm.edu/course-search/>

ECON 210 Economic Statistics

3 cr. Undergraduate.

Basic probability and statistics; numerical and graphical methods of describing data, elementary probability, random variables and probability distributions, hypothesis testing, simple linear regression.

Prerequisites: MATH 105(P), MATH 108(P), or Math Placement Level 30 or higher.

General Education Requirements: QL B

Last Taught: Spring 2025, Fall 2024, Spring 2024, Fall 2023.

Current Offerings: <https://catalog.uwm.edu/course-search/>

ECON 231 Analysis of American Industries

3 cr. Undergraduate.

Performance of key U.S. industries (e.g. education, beer, cars, medicinal drugs, radio, television, sports, steel, food, music recording); their responses to changing national/international economic conditions.

Prerequisites: soph st; Econ 103(P).

Current Offerings: <https://catalog.uwm.edu/course-search/>

ECON 248 Economics of Discrimination

3 cr. Undergraduate.

Use of economic theory to examine the history, current status, and policies regarding various minority groups in the United States. Applications include education, housing, jobs.

Prerequisites: none.

General Education Requirements: SS, CD

Last Taught: Spring 2025, Fall 2024, Spring 2024, Fall 2023.

Current Offerings: <https://catalog.uwm.edu/course-search/>

ECON 258 Selected Topics in Economics:

1-3 cr. Undergraduate.

Focus on special topics not normally discussed in detail in other existing courses.

Prerequisites: sophomore standing; consent of instructor.

Course Rules: May be retaken with change in topic to 9 cr max.

Last Taught: Spring 2024, Spring 2023, Spring 2020, Spring 2019.

Current Offerings: <https://catalog.uwm.edu/course-search/>

ECON 289 Internship in Economics, Lower Division

1-6 cr. Undergraduate.

Application of basic principles of economics in a business, organizational, educational, political, or other appropriate setting.

Prerequisites: 100-level course in economics; 2.25 GPA and consent of supervising faculty member.

Course Rules: One cr granted for academic work based on 40 hrs in the internship. May be retaken to 6 cr max.

Last Taught: Summer 2004, Spring 2004, Summer 2002, Spring 1999.

Current Offerings: <https://catalog.uwm.edu/course-search/>

ECON 297 Study Abroad:

1-12 cr. Undergraduate.

Designed to enroll students in UWM sponsored program before course work level, content and credits are determined and/or in specially prepared program course work.

Prerequisites: acceptance for Study Abroad Program.

Course Rules: May be retaken with change in topic.

Last Taught: Spring 2025, Fall 2024, Spring 2023, Fall 2022.

Current Offerings: <https://catalog.uwm.edu/course-search/>

ECON 299 Ad Hoc:

1-6 cr. Undergraduate.

Course created expressly for offering in a specified enrollment period.

Requires only dept & assoc dean approval. In exceptional circumstances, can be offered in one add'l sem.

Prerequisites: none; add'l prereqs may be assigned to specific topic.

Course Rules: May be retaken w/chg in topic.

Current Offerings: <https://catalog.uwm.edu/course-search/>

ECON 301 Intermediate Microeconomics

3 cr. Undergraduate.

Contemporary theory of consumption, production, pricing, resource allocation, and distribution.

Prerequisites: Econ 103(P).

Last Taught: Spring 2025, Fall 2024, Summer 2024, Spring 2024.

Current Offerings: <https://catalog.uwm.edu/course-search/>

ECON 302 Intermediate Macroeconomics

3 cr. Undergraduate.

Analysis of savings, production, investment and other aggregates in the national and international economy as related to the determination of national income, inflation, and unemployment.

Prerequisites: Econ 104(P).

Last Taught: Summer 2025, Spring 2025, Fall 2024, Spring 2024.

Current Offerings: <https://catalog.uwm.edu/course-search/>

ECON 310 Introduction to Econometrics and Data Science

3 cr. Undergraduate/Graduate.

Statistical research methods, especially cross-sectional and panel-data regression and hypothesis testing, applied to the evaluation of empirical data and a directed research project using programming languages (STATA, R, Python, Matlab, etc.)

Prerequisites: ECON 210(P), MTHSTAT 215(P), BUS ADM 210(P), or BUS ADM 211(P); or consent of instructor.

Course Rules: Not open for cr to students who have cr in ECON 513(531).

Last Taught: Fall 2024.

Current Offerings: <https://catalog.uwm.edu/course-search/>

ECON 310G Introduction to Econometrics and Data Science

3 cr. Undergraduate/Graduate.

Statistical research methods, especially cross-sectional and panel-data regression and hypothesis testing, applied to the evaluation of empirical data and a directed research project using programming languages (STATA, R, Python, Matlab, etc.)

Prerequisites: ECON 210(P), MTHSTAT 215(P), BUS ADM 210(P), or BUS ADM 211(P); or consent of instructor.

Course Rules: Not open for cr to students who have cr in ECON 513(531).

Last Taught: Fall 2024.

Current Offerings: <https://catalog.uwm.edu/course-search/>

ECON 325 Money and Banking

3 cr. Undergraduate.

Stocks, bonds, derivatives, foreign exchange. Analysis of commercial banks, investment banks, brokerages, etc. Domestic and international monetary theory and policy. Risk insurances, regulations, deregulation..

Prerequisites: Econ 104(P).

Last Taught: Spring 2025, Fall 2024, Spring 2024, Fall 2023.

Current Offerings: <https://catalog.uwm.edu/course-search/>

ECON 328 Environmental Economics

3 cr. Undergraduate.

Evaluating public policy of environmental and natural resources.

Regulation of pollution, endangered species, natural resources, and other case studies.

Prerequisites: Econ 103(P).

Last Taught: Spring 2025, Fall 2024, Spring 2024, Fall 2023.

Current Offerings: <https://catalog.uwm.edu/course-search/>

ECON 335 Economics of Antitrust Laws

3 cr. Undergraduate.

Examination of laws intended to increase competition; their evolution through landmark cases involving price fixing, mergers toward monopoly, and unfair competition including IBM, AT&T, Microsoft.

Prerequisites: Econ 103(P).

Current Offerings: <https://catalog.uwm.edu/course-search/>

ECON 351 Introduction to International Economic Relations

3 cr. Undergraduate.

International economics and finance, determinants and structure of international trade, commercial policy, foreign exchange markets, and balance of payments.

Prerequisites: Econ 100(P); or both 103(P) & 104(P).

Course Rules: Not open for cr to students who have cr in both Econ 454 & 455.

Last Taught: Spring 2025, Fall 2024, Spring 2024, Fall 2023.

Current Offerings: <https://catalog.uwm.edu/course-search/>

ECON 353 Economic Development

3 cr. Undergraduate.

Examination of determinants of growth, modernization, poverty, and inequality in developing countries of Africa, Asia, and Latin America. Analysis of development strategies.

Prerequisites: Econ 103(P) & 104(P).

Last Taught: Spring 2025, Fall 2024, Spring 2024, Fall 2023.

Current Offerings: <https://catalog.uwm.edu/course-search/>

ECON 381 Honors Seminar:

3 cr. Undergraduate.

Examination of current economic issues such as energy, environment, poverty, and human resource development.

Prerequisites: sophomore standing; HONORS 200(P); consent of Honors College director.

Course Rules: May be retaken with change in topic to 9 cr max.

General Education Requirements: SS

Last Taught: Spring 2024, Fall 2016, Spring 2015, Spring 2006.

Current Offerings: <https://catalog.uwm.edu/course-search/>

ECON 404 Economic Applications of Game Theory

3 cr. Undergraduate.

Strategic interaction among decision makers. Studies multi-party decision problems of a firm, a government, or a country.

Prerequisites: jr st; Econ 301(R) or cons instr.**Last Taught:** Spring 2025, Fall 2024, Spring 2023, Fall 2022.**Current Offerings:** <https://catalog.uwm.edu/course-search/>**ECON 411 Economic Forecasting Methods**

3 cr. Undergraduate/Graduate.

Economic time series, analysis, forecasts. Trends, seasonality, cycles. Univariate and multivariate time series models. Application of machine learning models to macro and financial data. Extensive use of econometric and statistical software.

Prerequisites: junior standing, ECON 210(P), and ECON 310(P); or consent of instructor.**Last Taught:** Spring 2025.**Current Offerings:** <https://catalog.uwm.edu/course-search/>**ECON 411G Economic Forecasting Methods**

3 cr. Undergraduate/Graduate.

Economic time series, analysis, forecasts. Trends, seasonality, cycles. Univariate and multivariate time series models. Application of machine learning models to macro and financial data. Extensive use of econometric and statistical software.

Prerequisites: junior standing, ECON 210(P), and ECON 310(P); or consent of instructor.**Last Taught:** Spring 2025.**Current Offerings:** <https://catalog.uwm.edu/course-search/>**ECON 413 Statistics for Economists**

3 cr. Undergraduate/Graduate.

Elements of probability; joint marginal and conditional distributions; measures of central tendency and dispersion, calculus of expectations; central limit theorem. Estimation and testing of economic relations.

Prerequisites: junior standing; ECON 210(P); MATH 211(P) & consent of instructor; or MATH 231(P). MATH 232(R) & MATH 233(R).**Last Taught:** Fall 2017, Fall 2016.**Current Offerings:** <https://catalog.uwm.edu/course-search/>**ECON 413G Statistics for Economists**

3 cr. Undergraduate/Graduate.

Elements of probability; joint marginal and conditional distributions; measures of central tendency and dispersion, calculus of expectations; central limit theorem. Estimation and testing of economic relations.

Prerequisites: junior standing; ECON 210(P); MATH 211(P) & consent of instructor; or MATH 231(P). MATH 232(R) & MATH 233(R).**Last Taught:** Fall 2017, Fall 2016.**Current Offerings:** <https://catalog.uwm.edu/course-search/>**ECON 415 Economics of Employment and Labor Relations**

3 cr. Undergraduate/Graduate.

Analysis of wage setting, labor markets, human capital and collective bargaining. Study of labor standards, regulation and the role of unions and government.

Prerequisites: jr st; Econ 103(P).**Last Taught:** Spring 2025.**Current Offerings:** <https://catalog.uwm.edu/course-search/>**ECON 415G Economics of Employment and Labor Relations**

3 cr. Undergraduate/Graduate.

Analysis of wage setting, labor markets, human capital and collective bargaining. Study of labor standards, regulation and the role of unions and government.

Prerequisites: jr st; Econ 103(P).**Last Taught:** Spring 2025.**Current Offerings:** <https://catalog.uwm.edu/course-search/>**ECON 426 Public Economics**

3 cr. Undergraduate/Graduate.

Economic analysis of government and policy, including taxation and expenditures, policy responses to market failures, redistributive programs, and related topics.

Prerequisites: jr st; Econ 104(P) & 301(P).**Last Taught:** Spring 2025.**Current Offerings:** <https://catalog.uwm.edu/course-search/>**ECON 426G Public Economics**

3 cr. Undergraduate/Graduate.

Economic analysis of government and policy, including taxation and expenditures, policy responses to market failures, redistributive programs, and related topics.

Prerequisites: jr st; Econ 104(P) & 301(P).**Last Taught:** Spring 2025.**Current Offerings:** <https://catalog.uwm.edu/course-search/>**ECON 432 Industrial Organization**

3 cr. Undergraduate/Graduate.

Economic analysis of asymmetric information, barriers to competitive entry, licensing, pricing practices/transactions costs; application to markets for insurance, computers, health care, used cars, food.

Prerequisites: jr st; Econ 301(P).**Last Taught:** Fall 2024, Fall 2023.**Current Offerings:** <https://catalog.uwm.edu/course-search/>**ECON 432G Industrial Organization**

3 cr. Undergraduate/Graduate.

Economic analysis of asymmetric information, barriers to competitive entry, licensing, pricing practices/transactions costs; application to markets for insurance, computers, health care, used cars, food.

Prerequisites: jr st; Econ 301(P).**Last Taught:** Fall 2024, Fall 2023.**Current Offerings:** <https://catalog.uwm.edu/course-search/>**ECON 447 Labor Economics**

3 cr. Undergraduate/Graduate.

The economics of unions, minimum wage, poverty and welfare programs; influence of international trade on domestic labor markets. Study of labor supply and labor demand.

Prerequisites: jr st; Econ 301(P).**Last Taught:** Spring 2020, Spring 2019.**Current Offerings:** <https://catalog.uwm.edu/course-search/>**ECON 447G Labor Economics**

3 cr. Undergraduate/Graduate.

The economics of unions, minimum wage, poverty and welfare programs; influence of international trade on domestic labor markets. Study of labor supply and labor demand.

Prerequisites: jr st; Econ 301(P).**Last Taught:** Spring 2020, Spring 2019.**Current Offerings:** <https://catalog.uwm.edu/course-search/>

ECON 448 Economics of Human Resources

3 cr. Undergraduate/Graduate.

The economics of education, training, discrimination, and workplace incentives. Study of hiring, promotion, and job search.

Prerequisites: jr st; Econ 103(P) or cons instr.**Last Taught:** Fall 2024.**Current Offerings:** <https://catalog.uwm.edu/course-search/>**ECON 448G Economics of Human Resources**

3 cr. Undergraduate/Graduate.

The economics of education, training, discrimination, and workplace incentives. Study of hiring, promotion, and job search.

Prerequisites: jr st; Econ 103(P) or cons instr.**Last Taught:** Fall 2024.**Current Offerings:** <https://catalog.uwm.edu/course-search/>**ECON 450 Health Economics**

3 cr. Undergraduate/Graduate.

Efficiency of medical care, health insurance and access to care, alternative models of health care delivery, health behaviors and public policy.

Prerequisites: jr st; Econ 103(P).**Last Taught:** Spring 2025.**Current Offerings:** <https://catalog.uwm.edu/course-search/>**ECON 450G Health Economics**

3 cr. Undergraduate/Graduate.

Efficiency of medical care, health insurance and access to care, alternative models of health care delivery, health behaviors and public policy.

Prerequisites: jr st; Econ 103(P).**Last Taught:** Spring 2025.**Current Offerings:** <https://catalog.uwm.edu/course-search/>**ECON 454 International Trade**

3 cr. Undergraduate/Graduate.

Why countries trade; who wins, who loses; facts about world trade; political economy of trade. Balance of payments, Asian crisis, European Union, American wage dispersion.

Prerequisites: jr st; Econ 301(P).**Last Taught:** Fall 2024, Fall 2023.**Current Offerings:** <https://catalog.uwm.edu/course-search/>**ECON 454G International Trade**

3 cr. Undergraduate/Graduate.

Why countries trade; who wins, who loses; facts about world trade; political economy of trade. Balance of payments, Asian crisis, European Union, American wage dispersion.

Prerequisites: jr st; Econ 301(P).**Last Taught:** Fall 2024, Fall 2023.**Current Offerings:** <https://catalog.uwm.edu/course-search/>**ECON 455 International Finance**

3 cr. Undergraduate/Graduate.

International monetary system; spot and foreign exchange markets; balance of payments; international adjustment mechanisms; international finance policy; history and institution.

Prerequisites: jr st; Econ 302(P).**Last Taught:** Spring 2024.**Current Offerings:** <https://catalog.uwm.edu/course-search/>**ECON 455G International Finance**

3 cr. Undergraduate/Graduate.

International monetary system; spot and foreign exchange markets; balance of payments; international adjustment mechanisms; international finance policy; history and institution.

Prerequisites: jr st; Econ 302(P).**Last Taught:** Spring 2024.**Current Offerings:** <https://catalog.uwm.edu/course-search/>**ECON 458 Selected Topics in Economics:**

3 cr. Undergraduate/Graduate.

Variable content course designed to focus on special topics not normally discussed in detail in other existing courses.

Prerequisites: jr st & cons instr.**Course Rules:** May be retaken w/chg in topic.**Last Taught:** Spring 2022.**Current Offerings:** <https://catalog.uwm.edu/course-search/>**ECON 458G Selected Topics in Economics:**

3 cr. Undergraduate/Graduate.

Variable content course designed to focus on special topics not normally discussed in detail in other existing courses.

Prerequisites: jr st & cons instr.**Course Rules:** May be retaken w/chg in topic.**Last Taught:** Spring 2022.**Current Offerings:** <https://catalog.uwm.edu/course-search/>**ECON 489 Internship in Economics, Upper Division**

1-6 cr. Undergraduate.

Application of advanced principles of economics in a business, organizational, educational, political, or other appropriate setting.

Prerequisites: junior standing; 300-level or above course in economics; 2.25 GPA and consent of supervising faculty member.**Course Rules:** One cr granted for academic work based on 40 hrs in the Internship. May be retaken to 6 cr max.**Last Taught:** Summer 2024, Spring 2024, Fall 2023, Spring 2023.**Current Offerings:** <https://catalog.uwm.edu/course-search/>**ECON 497 Study Abroad:**

1-12 cr. Undergraduate/Graduate.

Designed to enroll students in UWM sponsored program before course work level, content, and credits are determined and/or in specially prepared program course work.

Prerequisites: junior standing and acceptance in Study Abroad Program.**Course Rules:** May be retaken with change in topic.**Last Taught:** Spring 2025, Spring 2023.**Current Offerings:** <https://catalog.uwm.edu/course-search/>**ECON 497G Study Abroad:**

1-12 cr. Undergraduate/Graduate.

Designed to enroll students in UWM sponsored program before course work level, content, and credits are determined and/or in specially prepared program course work.

Prerequisites: junior standing and acceptance in Study Abroad Program.**Course Rules:** May be retaken with change in topic.**Last Taught:** Spring 2025, Spring 2023.**Current Offerings:** <https://catalog.uwm.edu/course-search/>

ECON 499 Ad Hoc:

1-6 cr. Undergraduate.

Course created expressly for offering in a specified enrollment period.

Requires only dept & assoc dean approval. In exceptional circumstances, can be offered in one add'l sem.

Prerequisites: jr st; add'l prereqs may be assigned to specific topic.

Course Rules: May be retaken w/chg in topic.

Last Taught: Fall 2002, Fall 1993.

Current Offerings: <https://catalog.uwm.edu/course-search/>

ECON 506 Mathematical Economics I

3 cr. Undergraduate/Graduate.

Mathematical techniques used in economic analysis, including calculus and matrix algebra. Applications include optimizing behavior of firms and consumers.

Prerequisites: jr st; Econ 301(P); Math 211(P) & cons instr, or Math 231(P). Math 232(R) & 233(R).

Last Taught: Fall 2024.

Current Offerings: <https://catalog.uwm.edu/course-search/>

ECON 506G Mathematical Economics I

3 cr. Undergraduate/Graduate.

Mathematical techniques used in economic analysis, including calculus and matrix algebra. Applications include optimizing behavior of firms and consumers.

Prerequisites: jr st; Econ 301(P); Math 211(P) & cons instr, or Math 231(P). Math 232(R) & 233(R).

Last Taught: Fall 2024.

Current Offerings: <https://catalog.uwm.edu/course-search/>

ECON 513 Introduction to Econometrics

3 cr. Undergraduate/Graduate.

Multiple regression, generalized least squares, specification analysis, multicollinearity, multiple equations including simultaneous equations.

Prerequisites: junior standing and ECON 413(P).

Last Taught: Spring 2017, Spring 2015.

Current Offerings: <https://catalog.uwm.edu/course-search/>

ECON 513G Introduction to Econometrics

3 cr. Undergraduate/Graduate.

Multiple regression, generalized least squares, specification analysis, multicollinearity, multiple equations including simultaneous equations.

Prerequisites: junior standing and ECON 413(P).

Last Taught: Spring 2017, Spring 2015.

Current Offerings: <https://catalog.uwm.edu/course-search/>

ECON 525 The Economics of Water

3 cr. Undergraduate/Graduate.

Comprehensive development of water resource economics for engineers, scientists, and economists; analysis of the public and private sector economics of water resources.

Prerequisites: jr st; Econ 103(P); Math 231(P); a statistics course; or cons instr.

Current Offerings: <https://catalog.uwm.edu/course-search/>

ECON 525G The Economics of Water

3 cr. Undergraduate/Graduate.

Comprehensive development of water resource economics for engineers, scientists, and economists; analysis of the public and private sector economics of water resources.

Prerequisites: jr st; Econ 103(P); Math 231(P); a statistics course; or cons instr.

Current Offerings: <https://catalog.uwm.edu/course-search/>

ECON 606 Mathematical Economics II

3 cr. Undergraduate/Graduate.

Difference and differential equations applied to economic variables such as human capital, consumption, learning, energy use, and pollution.

Essential preparation for graduate work.

Prerequisites: jr st; Econ 506(P).

Last Taught: Spring 2025, Spring 2023.

Current Offerings: <https://catalog.uwm.edu/course-search/>

ECON 606G Mathematical Economics II

3 cr. Undergraduate/Graduate.

Difference and differential equations applied to economic variables such as human capital, consumption, learning, energy use, and pollution.

Essential preparation for graduate work.

Prerequisites: jr st; Econ 506(P).

Last Taught: Spring 2025, Spring 2023.

Current Offerings: <https://catalog.uwm.edu/course-search/>

ECON 699 Independent Work

1-3 cr. Undergraduate.

Advanced independent work under the supervision of an ECON faculty or instructional academic staff member.

Prerequisites: jr st, 2.0 GPA; consent of instructor, Department Chair, and Assistant Dean for Student Academic Services.

Course Rules: May be retaken with change in topic.

Last Taught: Spring 2025, Spring 2024, Fall 2022, Summer 2022.

Current Offerings: <https://catalog.uwm.edu/course-search/>

ECON 701 Economic Theory: Microeconomics

4 cr. Graduate.

Conventional theory of the behavior of firms, consumers, and markets; partial and general equilibria.

Prerequisites: grad st; Econ 301(P). Econ 506(R).

Last Taught: Fall 2024, Fall 2023, Fall 2022, Fall 2021.

Current Offerings: <https://catalog.uwm.edu/course-search/>

ECON 702 Economic Theory: Macroeconomics

4 cr. Graduate.

Aggregative economic analysis, problems of aggregation and significant aggregates; national income, flow-of-funds, and input-output.

Prerequisites: grad st; Econ 302(P). Econ 506(R).

Last Taught: Spring 2025, Spring 2024, Spring 2023, Spring 2022.

Current Offerings: <https://catalog.uwm.edu/course-search/>

ECON 703 Econometrics

4 cr. Graduate.

Regression theory, generalized least squares, heteroscedasticity, autocorrelation, multi-colinearity, distributed lags, and discrete variable models, system of equations.

Prerequisites: grad st

Course Rules: No cr for students who have grad cr in Econ 513.

Last Taught: Fall 2024, Fall 2023, Fall 2022, Fall 2021.

Current Offerings: <https://catalog.uwm.edu/course-search/>

ECON 706 Mathematical Economics

3 cr. Graduate.

Mathematical analysis of modern economic problems; dynamic input-output system, stability analysis, general equilibrium analysis, optimizing theory including linear and non-linear programming, activity analysis and turnpike theory, and mathematical growth models.

Prerequisites: grad st; Econ 506(P) & 606(P).

Last Taught: Fall 2007, Fall 2005, Fall 2004, Fall 2003.

Current Offerings: <https://catalog.uwm.edu/course-search/>

ECON 708 Industrial Organization I

3 cr. Graduate.

Exploration of the relationship between industrial structure and market performance. Topics covered include R&D, advertising and government regulations. Prereq: grad st; Econ 301(P), 302(P) & 506(P), or cons instr.

Last Taught: Spring 2025, Spring 2024, Spring 2023, Spring 2022.**Current Offerings:** <https://catalog.uwm.edu/course-search/>**ECON 709 Industrial Organization II**

3 cr. Graduate.

Evaluation of the economic impact of the anti-trust laws. Topics covered include horizontal restraint, vertical restraint, patent, and mergers.

Prerequisites: grad st; Econ 301(P), 302(P), & 413(P).**Last Taught:** Spring 2019, Spring 2018, Spring 2016, Spring 2015.**Current Offerings:** <https://catalog.uwm.edu/course-search/>**ECON 710 Applied Econometrics**

3 cr. Graduate.

Application of econometrics and data science to economics and finance. Study big data and machine learning models in economics. Extensive use of statistical software including R and Python.

Prerequisites: graduate standing; ECON 703(P).**Last Taught:** Fall 2023, Fall 2022, Spring 2017, Spring 2016.**Current Offerings:** <https://catalog.uwm.edu/course-search/>**ECON 712 Urban Economic Theory**

3 cr. Graduate.

Trends in U.S. urbanization and suburbanization. Studies of urban household and firm behavior. General equilibrium analytical and simulation models of urban structure.

Prerequisites: grad st; Econ 301(P).**Last Taught:** Fall 2008, Spring 1996, Spring 1992, Spring 1990.**Current Offerings:** <https://catalog.uwm.edu/course-search/>**ECON 713 Regional Economic Theory**

3 cr. Graduate.

Location theory and land-use patterns, regional social accounts and input-output models, shift-share analysis, regional econometric model, and growth policies.

Prerequisites: grad st; Econ 301(P) or cons instr; Econ 413(431)(R).**Last Taught:** Spring 2009, Fall 1995, Fall 1992, Fall 1991.**Current Offerings:** <https://catalog.uwm.edu/course-search/>**ECON 731 Money, Income, and Prices**

3 cr. Graduate.

Analysis of the demand for money by monetary theorists. Integration of theories into general equilibrium macro-models.

Prerequisites: grad st; Econ 302(P). Econ 702(R).**Last Taught:** Fall 2018, Fall 2016, Fall 2014, Fall 2013.**Current Offerings:** <https://catalog.uwm.edu/course-search/>**ECON 734 Econometrics and Machine Learning Methods**

3 cr. Graduate.

Statistical and econometric methods for econometrics research. Asymptotic theory; maximum likelihood, instrumental variables, generalized method of moments estimation; linear regression model; resampling methods; machine-learning-based methods (model selection, tree-based models, deep neural network).

Prerequisites: graduate standing, ECON 413(P) and ECON 506(P) or consent of instructor.**Last Taught:** Spring 2025, Spring 2024, Spring 2023, Spring 2022.**Current Offerings:** <https://catalog.uwm.edu/course-search/>**ECON 735 Causal Inference and Panel Data Econometrics**

3 cr. Graduate.

Review asymptotic distribution theory, linear models and linear estimators, and their extensions. Estimation and testing of econometric models; topics including estimators for panel data models, difference-in-differences, regression discontinuity, limited dependent variable models, machine learning estimators.

Prerequisites: graduate standing and ECON 734(P) or consent of instructor.**Last Taught:** Spring 2025, Fall 2023, Spring 2023, Fall 2021.**Current Offerings:** <https://catalog.uwm.edu/course-search/>**ECON 749 Urban Public Finance**

3 cr. Graduate.

Analysis of state and local government expenditures and revenues; demand for urban services, costs of supplying them, and methods of financing them.

Prerequisites: grad st; Econ 301(P).**Current Offerings:** <https://catalog.uwm.edu/course-search/>**ECON 751 Labor Economics I**

3 cr. Graduate.

Human capital investments: determinants of earnings (education, experience, incentives, discrimination, unions, compensating differentials); public sector labor markets; issues of retirement and aging.

Prerequisites: grad st; Econ 701(C).**Last Taught:** Fall 2024, Fall 2023, Fall 2022, Fall 2021.**Current Offerings:** <https://catalog.uwm.edu/course-search/>**ECON 752 Labor Economics II**

3 cr. Graduate.

Income distribution and inequality; migration and immigration; fertility, family structure, human capital and labor supply; unemployment and job search; selection bias; specialization and work organization.

Prerequisites: grad st; Econ 701(C).**Last Taught:** Spring 2024, Spring 2023, Spring 2022, Spring 2021.**Current Offerings:** <https://catalog.uwm.edu/course-search/>**ECON 753 Collective Bargaining**

3 cr. Graduate.

Economic and behavioral theories of collective bargaining, bargaining structure, impasses and truces, union effects, management goals, terms of the agreement and national policy.

Prerequisites: grad st; Ind Rel 701(R).**Course Rules:** May not be substituted for Econ 751 or 752 in meeting the concentration req of the Econ MA Non-thesis option or in preparing for Ph D prelims.**Last Taught:** Spring 2024, Spring 2023, Spring 2022, Spring 2021.**Current Offerings:** <https://catalog.uwm.edu/course-search/>**ECON 755 Comparative Labor Markets and Employment Relations**

3 cr. Graduate.

Labor market institutions, practices and performance. The U.S. is compared with western Europe, Japan and elsewhere.

Prerequisites: grad st; Econ 210(P) & 415(451)(P) or cons instr.**Course Rules:** May not substitute for Econ 751 or 752.**Last Taught:** Spring 2014, Spring 2010, Spring 2008, Spring 2006.**Current Offerings:** <https://catalog.uwm.edu/course-search/>

ECON 774 Economic Development - Theory

3 cr. Graduate.

Theories relating to production, distribution, and capital formation in less-developed nations.

Prerequisites: grad st; Econ 301(P) & 302(P).**Last Taught:** Fall 2023, Spring 2022, Fall 2019, Fall 2018.**Current Offerings:** <https://catalog.uwm.edu/course-search/>**ECON 775 Economic Growth**

3 cr. Graduate.

Issues related to applied economic growth, innovation economics, and environmental and energy economics.

Prerequisites: graduate standing; ECON 301(P) and ECON 302(P).**Last Taught:** Fall 2024, Fall 2022, Fall 2021, Spring 2019.**Current Offerings:** <https://catalog.uwm.edu/course-search/>**ECON 790 Research Seminar for M.A. Students**

3 cr. Graduate.

Basic research methods and guidance in developing a research proposal and writing a formal research paper.

Prerequisites: grad st**Last Taught:** Spring 2025, Fall 2024, Spring 2024, Fall 2023.**Current Offerings:** <https://catalog.uwm.edu/course-search/>**ECON 801 Advanced Microeconomic Theory I**

3 cr. Graduate.

Decision-making under risk and over time, general equilibrium and welfare, market failure, and applications, including demand systems, household production, interpersonal economics, and hedonic pricing.

Prerequisites: grad st; Econ 701(P) & 506(P). Econ 606(R).**Last Taught:** Fall 2024, Fall 2023, Fall 2022, Fall 2021.**Current Offerings:** <https://catalog.uwm.edu/course-search/>**ECON 802 Advanced Macroeconomic Theory I**

3 cr. Graduate.

Money, credit, and governmental operations in aggregative analysis; critical study of some aggregative and analytical systems.

Prerequisites: grad st; Econ 702(P).**Last Taught:** Fall 2024, Fall 2023, Fall 2022, Fall 2021.**Current Offerings:** <https://catalog.uwm.edu/course-search/>**ECON 803 Advanced Microeconomic Theory II**

3 cr. Graduate.

Theory of the firm, imperfect competition, game theory, asymmetric information, transaction costs and applications including matching/search, factor markets, contract theory, mechanism design and specialization.

Prerequisites: grad st; Econ 506 (P) & 701(P); Econ 606 (R).**Last Taught:** Spring 2025, Spring 2024, Spring 2023, Spring 2022.**Current Offerings:** <https://catalog.uwm.edu/course-search/>**ECON 804 Advanced Macroeconomic Theory II**

3 cr. Graduate.

Foundations of macroeconomics with a focus on global challenges, including innovation, unemployment, global warming, and the balance between markets and government regulations.

Prerequisites: graduate standing and ECON 802(P).**Last Taught:** Spring 2025, Spring 2024, Spring 2023, Spring 2022.**Current Offerings:** <https://catalog.uwm.edu/course-search/>**ECON 806 Mathematical Economics**

3 cr. Graduate.

Applications of dynamic optimization technique to modern economic problems; optimal economic growth, optimal pricing, optimal stabilization policies, etc.

Prerequisites: Econ 706(P).**Last Taught:** Fall 2006, Spring 2006, Spring 2005, Spring 2004.**Current Offerings:** <https://catalog.uwm.edu/course-search/>**ECON 831 Monetary Theory and Policy**

3 cr. Graduate.

Study of money, credit, and liquidity as related to income, employment, and prices. Study of goals and effectiveness of monetary and banking policy.

Prerequisites: grad st; Econ 701(P). Econ 702(C) or cons instr.**Last Taught:** Spring 2019, Spring 2015, Spring 2014, Spring 2012.**Current Offerings:** <https://catalog.uwm.edu/course-search/>**ECON 835 Time Series and Financial Econometrics**

3 cr. Graduate.

Time series econometrics and data analytics for macroeconomics and finance. ARMA, VAR, Forecasting, Cointegration, State Space Models, Machine Learning Models.

Prerequisites: graduate standing and ECON 735(P).**Last Taught:** Fall 2024, Spring 2024, Spring 2022, Spring 2021.**Current Offerings:** <https://catalog.uwm.edu/course-search/>**ECON 871 The Pure Theory of International Trade**

3 cr. Graduate.

Examines for both static and growing economies the impact of trade upon relative prices of goods and factors of production.

Prerequisites: grad st; Econ 701(P).**Last Taught:** Fall 2020, Fall 2017, Fall 2016, Fall 2014.**Current Offerings:** <https://catalog.uwm.edu/course-search/>**ECON 872 Money in the International Economy**

3 cr. Graduate.

Examines the theory and measurement of the balance of payments, appropriate policies for internal and external balance, the problems of making international payments and the issue of exchange rate flexibility.

Prerequisites: Econ 702(P) & 455(576)(P).**Last Taught:** Spring 2021, Spring 2020, Spring 2018, Spring 2015.**Current Offerings:** <https://catalog.uwm.edu/course-search/>**ECON 888 Candidate for Degree**

0 cr. Graduate.

Available for graduate students who must meet minimum credit load requirement.

Prerequisites: graduate standing.**Course Rules:** Fee for 1 cr assessed; unit does not count towards credit load for Fin Aid. Repeatable. Satisfactory/Unsatisfactory only.**Last Taught:** Spring 2022, Summer 2021, Spring 2017, Summer 2016.**Current Offerings:** <https://catalog.uwm.edu/course-search/>**ECON 905 Seminar: Banking and Monetary Theory:**

3 cr. Graduate.

Consideration of the relationship between monetary policy and short-run fluctuations and long-run economic trends.

Prerequisites: grad st; Econ 831(P) or cons instr.**Course Rules:** May be retaken with change in topic to 6 cr max.**Last Taught:** Fall 2020, Fall 2017, Fall 2013, Spring 2013.**Current Offerings:** <https://catalog.uwm.edu/course-search/>

ECON 915 Seminar: Econometric Methods:

3 cr. Graduate.

Selected advanced topics in econometric methods and their application to current economic problems.

Prerequisites: grad st; Econ 835(P).

Course Rules: Retakable w/chg in topic to 6 cr max.

Last Taught: Fall 2020, Fall 2012, Fall 2011, Spring 1994.

Current Offerings: <https://catalog.uwm.edu/course-search/>

ECON 931 Seminar: Regulated Industries:

3 cr. Graduate.

Research in the field of public utilities and other regulated industries, with emphasis on changing the emerging transportation problems.

Prerequisites: grad st; Econ 701(P).

Course Rules: Retakable w/chg in topic to 6 cr max.

Current Offerings: <https://catalog.uwm.edu/course-search/>

ECON 947 Seminar: Public Finance:

3 cr. Graduate.

Advanced study of public finance problems and literature. Research.

Prerequisites: grad st; Econ 701(P) & 702(P).

Course Rules: Retakable w/chg in topic to 6 cr max.

Current Offerings: <https://catalog.uwm.edu/course-search/>

ECON 974 Seminar: Economic Development and Growth:

3 cr. Graduate.

Analysis of advanced topics relating to the process of economic development and theory of growth.

Prerequisites: grad st; Econ 774(P) & 775(P).

Course Rules: Retakable w/chg in topic to 6 cr max.

Last Taught: Spring 2007, Spring 2006, Fall 2005, Spring 2005.

Current Offerings: <https://catalog.uwm.edu/course-search/>

ECON 990 Graduate Thesis

1-3 cr. Graduate.

Reserved for research in connection with doctoral thesis.

Prerequisites: grad st; cons major prof.

Course Rules: Retakable as necessary to fulfill thesis requirements.

Last Taught: Spring 2025, Fall 2024, Summer 2024, Spring 2024.

Current Offerings: <https://catalog.uwm.edu/course-search/>

ECON 991 Workshop in Economic Research:

2-3 cr. Graduate.

Individual research and group discussion of selected problems in economic theory and its applications.

Prerequisites: grad st & cons instr.

Course Rules: Retakable with change in topic to 9 cr max.

Last Taught: Spring 2015, Spring 2001, Fall 1992.

Current Offerings: <https://catalog.uwm.edu/course-search/>

ECON 999 Independent Work

1-3 cr. Graduate.

Prerequisites: grad st; cons instr.

Course Rules: Retakable w/chg in topic to 9 cr max.

Last Taught: Summer 2025, Spring 2025, Fall 2024, Spring 2024.

Current Offerings: <https://catalog.uwm.edu/course-search/>