ECONOMICS (ECON)

ECON F101X Principles of Microeconomics (s) 3 Credits
Offered Fall, Spring and Summer
Presents the tools and concepts needed for analysis of economic decision-making at the level of the individual (consumer, firm, government), and explores how those decisions affect market outcomes. Explores the theory of prices and markets, industrial organization, public policy, income distribution, and contemporary problems of labor and business.
Attributes: UAF GER Social Sciences Req
Lecture + Lab + Other: 3 + 0 + 0

ECON F102X Principles of Macroeconomics (s) 3 Credits
Offered Fall, Spring and Summer
Theoretical approach to determination of the national income level and economic activity including coverage of the history of macroeconomic theory with special emphasis on economic growth, inflation, business cycles, international finance, and monetary and fiscal policy.
Attributes: UAF GER Social Sciences Req
Lecture + Lab + Other: 3 + 0 + 0

ECON F111X The Economy of Rural Alaska (an) 3 Credits
Offered Fall and Spring
Examine the significance of Alaska Native economies and their role in the modern Alaska economy. To include the challenges facing rural communities, and the role of social and cultural capital. Economic indicators which incorporate Alaska Native health, education, food, energy and resource security, and economic opportunity are evaluated also.
Attributes: UAF GER Social Sciences Req
Lecture + Lab + Other: 3 + 0 + 0

ECON F120X Introduction to Economic Analysis (s) 3 Credits
Offered As Demand Warrants
This course will introduce you to the fundamentals of economic analysis and reasoning and provide you the tools to analyze the behavior of individuals, firms, communities and government under conditions of unlimited wants and scarce resources.
Prerequisites: Placement in WRTG F111X.
Attributes: UAF Core Political Economy, UAF GER Social Sciences Req
Lecture + Lab + Other: 3 + 0 + 0

ECON F227 Introductory Statistics for Economics and Business 3 Credits
Offered Fall, Spring and Summer
Introduces statistical theory and methods with an emphasis on economics and business applications. Includes descriptive statistics, probability and probability distribution, statistical inference and regression modelling.
Lecture + Lab + Other: 3 + 0 + 0

ECON F235X Introduction to Natural Resource Economics (s) 3 Credits
Offered Fall
Microeconomic principles and their application to natural resource issues. Topics include supply, demand, marginality, optimality, elementary production economics, economic rent and comparative advantage. These principles applied to agency budget allocation decisions, multiple use, resource valuation, conservation, market failure and public outdoor recreation problems.
Attributes: UAF GER Social Sciences Req
Lecture + Lab + Other: 3 + 0 + 0

ECON F321 Intermediate Microeconomics (s) 3 Credits
Offered Fall and Spring
Analysis of demand and supply under various market forms, cost and theory of production, factor pricing and theory of distribution and survey of welfare economics.
Prerequisites: ECON F101X; ECON F102X; MATH F122X or equivalent.
Lecture + Lab + Other: 3 + 0 + 0

ECON F322 Managerial Economics 3 Credits
Interpretation of economic data and applications of economic theory in business firms. Bridging the gap between theory and practice through empirical studies, cases and decision problems. Emphasis upon decision-making using analysis of research data.
Prerequisites: ECON F101X; ECON F102X; MATH F230X.
Lecture + Lab + Other: 3 + 0 + 0

ECON F324 Intermediate Macroeconomics (s) 3 Credits
Offered As Demand Warrants
This is a one-semester undergraduate-level course in intermediate macroeconomics. We will study the concepts and measurement of income, analysis of aggregate demand and supply and their relation to the level of prices, employment and economic growth.
Prerequisites: ECON F101X; ECON F102X; MATH F122X or equivalent.
Lecture + Lab + Other: 3 + 0 + 0

ECON F327 Intermediate Econometrics for Forecasting and Business 3 Credits
Offered As Demand Warrants
Extension of topics discussed in ECON F227. Understanding the fundamental theory underlying regression methods and learning how to appropriately apply these techniques in the analysis of economic and business problems. Simple and multiple regression and correlation, analysis of variance, forecasting techniques, quality control, nonparametric methods and decision theory.
Prerequisites: STAT F200X or ECON F227.
Lecture + Lab + Other: 3 + 0 + 0

ECON F335 Intermediate Natural Resource Economics (s) 3 Credits
Extension of concepts developed in ECON F235X, using a higher level of economic analysis. Topics include welfare economics and economic efficiency concepts, benefit/cost analysis, resource allocation over time, resource taxation, common property problems, externalities, public goods, valuation of non-market resources, and land use planning issues.
Prerequisites: COJO F131X or COJO F141X; ECON F101X; ECON F102X or ECON F235X; MATH F230X.
Lecture + Lab + Other: 3 + 0 + 0
ECON F350  Money and Banking  (s)  
3 Credits  
Offered As Demand Warrants  
The liquid wealth system in the United States, including the commercial banking system, the Federal Reserve System and nonbank financial institutions; the regulation of money and credit and its impact on macroeconomic policy objectives.  
Prerequisites: ECON F101X; ECON F102X.  
Lecture + Lab + Other: 3 + 0 + 0  

ECON F351  Public Finance  (s)  
3 Credits  
Offered As Demand Warrants  
Economic justifications for government; federal, state and local government, taxation, spending and debt; their effects on allocation, distribution, stabilization and growth.  
Prerequisites: ECON F101X; ECON F102X; MATH F122X or equivalent.  
Lecture + Lab + Other: 3 + 0 + 0  

ECON F409  Industrial Organization and Public Policy  (W, s)  
3 Credits  
The relationship of market structure to the economic conduct and performance of firms and industries, the determinants, measurement and classification of market structure, public policy toward mergers, industrial and aggregate concentration.  
Prerequisites: ECON F101X; ECON F102X; WRTG F111X; WRTG F211X, WRTG F212X, WRTG F213X or WRTG F214X; MATH F230X; upper division standing.  
Lecture + Lab + Other: 3 + 0 + 0  

ECON F420  Labor Markets and Public Policy  (W, s)  
3 Credits  
Offered As Demand Warrants  
Application of labor market analysis and wage theory as they relate to public policy issues. Topics include determination of wages, taxation and employment, economic impact of unions, economics of discrimination, and issues relating to women's and minorities' changing roles in the labor market.  
Prerequisites: ECON F101X; ECON F102X; WRTG F111X; WRTG F211X, WRTG F212X, WRTG F213X or WRTG F214X.  
Lecture + Lab + Other: 3 + 0 + 0  

ECON F434  Environmental Economics  (W)  
3 Credits  
Offered As Demand Warrants  
An extension of concepts introduced in ECON F235X, using a higher level of economic analysis. An analysis of the economic forces involved in environmental degradation, preservation and regulation. Topics include pollution, biodiversity, wilderness and climatic change.  
Prerequisites: ECON F101X and ECON F102X or ECON F235X; MATH F122X; WRTG F111X; WRTG F211X, WRTG F212X, WRTG F213X or WRTG F214X.  
Lecture + Lab + Other: 3 + 0 + 0  

ECON F439  Energy Economics  (W, s)  
3 Credits  
Offered As Demand Warrants  
Market forces and institutions affecting the allocation of energy resources. Special attention to intertemporal allocative decisions and the role that public policy plays in influencing the rate at which energy resources are used over time.  
Prerequisites: ECON F101X and ECON F102X or ECON F235X; WRTG F111X; WRTG F211X, WRTG F212X, WRTG F213X or WRTG F214X.  
Stacked with ECON F639.  
Lecture + Lab + Other: 3 + 0 + 0  

ECON F451  Public Expenditure Analysis  (W)  
3 Credits  
Offered Spring Odd-numbered Years  
Purposes and economic effects of governmental expenditures, budgeting techniques, and their effects on resource allocation.  
Prerequisites: ECON F101X; ECON F102X; WRTG F111X; WRTG F211X, WRTG F212X, WRTG F213X or WRTG F214X; MATH F230X.  
Lecture + Lab + Other: 3 + 0 + 0  

ECON F463  International Economics  (W, s)  
3 Credits  
Prerequisites: ECON F101X; ECON F102X; WRTG F111X; WRTG F211X, WRTG F212X, WRTG F213X or WRTG F214X; MATH F230X.  
Lecture + Lab + Other: 3 + 0 + 0  

ECON F601  Microeconomic Theory I  
3 Credits  
Offered As Demand Warrants  
Analysis of consumer and producer theory, price determination and welfare economics.  
Prerequisites: ECON F321; MATH F251X; graduate standing.  
Lecture + Lab + Other: 3 + 0 + 0  

ECON F602  Economic Modeling  
3 Credits  
Offered As Demand Warrants  
A hands on approach to applied microeconomics and resource modeling. Students extend their training in economic theory and econometrics to model real life problems in the areas of renewable and exhaustible resources, non-market valuation and environmental economics. Special emphasis will be given to the use of econometric analyses.  
Prerequisites: ECON F601; ECON F626; graduate standing.  
Lecture + Lab + Other: 3 + 0 + 0  

ECON F603  Macroeconomic Theory I  
3 Credits  
Offered As Demand Warrants  
Analysis of the underlying causes of unemployment, economic instability, inflation and economic growth.  
Prerequisites: ECON F321; ECON F324; MATH F251X; graduate standing.  
Lecture + Lab + Other: 3 + 0 + 0  

ECON F613  Resilience Internship  
2 Credits  
Offered As Demand Warrants  
Students of the Resilience and Adaptation Program participate in internships to broaden their interdisciplinary training, develop new research tools and build expertise outside their home disciplines. Internships are for eight to ten weeks of full time commitment and take place during the student's first summer in the program. In autumn students meet to discuss their internship experiences and make public presentations.  
Prerequisites: ANTH F667, BIOL F667, ECON F667 or NRM F667; ANTH F668, BIOL F668, ECON F668 or NRM F668.  
Cross-listed with ANTH F617; BIOL F613; NRM F613.  
Lecture + Lab + Other: 2 + 0 + 0
ECON F616  Economics Background for Resilience and Adaptation  
1 Credit  
Offered As Demand Warrants  
Provides the economics background that is necessary for understanding the role of economics in complex systems involving interactions among biological, economic, and social processes. Designed for incoming students of the Resilience and Adaptation Program (RAP), who have not received training in ecology.  
Prerequisites: Graduate student enrollment.  
Lecture + Lab + Other: 1 + 0 + 0  

ECON F623  Mathematical Economics  
3 Credits  
Offered As Demand Warrants  
Mathematical techniques including matrix algebra, differential and integral calculus. Particular attention is given to static and comparative statics analysis and dynamic models.  
Prerequisites: MATH F251X; graduate standing.  
Lecture + Lab + Other: 3 + 0 + 0  

ECON F626  Econometrics  
3 Credits  
Offered As Demand Warrants  
Introduction to econometric theory. Single equation and multiple equation system estimation, including inference and hypothesis testing and results of assumption violation.  
Prerequisites: ECON F227; MATH F251X; STAT F401; graduate standing.  
Lecture + Lab + Other: 3 + 0 + 0  

ECON F627  Advanced Econometrics  
3 Credits  
Offered As Demand Warrants  
Advanced Econometrics is the second graduate econometrics course in the Ph.D. in Resource Economic program. This course builds upon the theoretical and empirical tools developed in ECON F626. Large sample theory and the Maximum Likelihood estimation theory are covered. Limited dependent variable models widely used in applied microeconometric modeling are developed and extended. Univariate and multivariate time series modeling and forecasting is developed.  
Prerequisites: ECON F626; graduate standing.  
Lecture + Lab + Other: 3 + 0 + 0  

ECON F635  Renewable Resource Economics  
3 Credits  
Offered As Demand Warrants  
The theory, methods of analysis and current literature of natural resource economics and policy for fisheries, forests and wildlife. Topics include externalities, property rights, public goods, benefit-cost analysis, amenity values and other non-market resource services, and environmental policy.  
Prerequisites: ECON F321; ECON F335; MATH F251X; graduate standing.  
Lecture + Lab + Other: 3 + 0 + 0  

ECON F636  Nonrenewable Resource Economics  
3 Credits  
Offered As Demand Warrants  
Exploration of issues relating to the mineral and energy markets. The analysis of energy and mineral use over time, capital investment problems and world market dynamics are explored. Topics include futures markets, present value, energy value and entropy.  
Prerequisites: ECON F321; ECON F335; MATH F251X; graduate standing.  
Lecture + Lab + Other: 3 + 0 + 0  

ECON F637  Evolution of Conservation Concepts and Policy  
3 Credits  
Offered As Demand Warrants  
Resource policy issues development and implementation including forestry, mining, fisheries, oil, wildlife and other topics as demand warrants. Focus on policy issues involved in management of Alaska's resources.  
Prerequisites: Graduate standing.  
Cross-listed with NRM F637.  
Lecture + Lab + Other: 3 + 0 + 0  

ECON F647  Sustainability in the Changing North  
3 Credits  
Offered As Demand Warrants  
Explores the basic principles of sustainability of environmental and social systems. Principles are applied across a range of scales from local communities to the globe, with an emphasis on examples in Alaska and the Arctic. Specific attention to the theory and practice of boundary spanning and knowledge coproduction.  
Prerequisites: Graduate standing.  
Cross-listed with ANTH F647; BIOL F647; NRM F647.  
Lecture + Lab + Other: 3 + 0 + 0  

ECON F649  Integrated Assessment and Adaptive Management  
3 Credits  
Offered As Demand Warrants  
An interdisciplinary exploration of the theoretical and practical considerations of integrated assessment and adaptive management. Students survey concepts important in understanding societal and professional-level decision-making. Students work as individuals and as a team to undertake case studies with relevance to integrated assessment and adaptive management. Collectively, the class builds a portfolio of cases and conducts an integrated assessment.  
Prerequisites: Graduate student standing in a natural science, social science or interdisciplinary program at UAF or another university.  
Recommended: ANTH F647, BIOL F647, ECON F647, NRM F647; ANTH F667, BIOL F667, ECON F667, NRM F667.  
Cross-listed with ANTH F649; BIOL F649; NRM F649.  
Special Notes: In case of enrollment limit, priority will be given to graduate students in the Resilience and Adaptation Program in order for them to be able to meet their core requirements.  
Lecture + Lab + Other: 3 + 0 + 0
ECON F667  Resilience Seminar I 
1 Credit  
Offered As Demand Warrants  
Provides a forum for new students of the Resilience and Adaptation graduate program to explore issues of interdisciplinary research that are relevant to sustainability. A considerable portion of the seminar is student-directed, with students assuming leadership in planning seminar activities with the instructor.  
**Prerequisites:** Enrolled in Resilience and Adaptation Graduate Program. 
**Recommended:** ANTH F647, BIOL F647, ECON F647 or NRM F647 (taken concurrently).  
**Cross-listed with** ANTH F667; BIOL F667; NRM F667.  
**Lecture + Lab + Other:** 2 + 0 + 0

ECON F668  Interdisciplinary Research Methods-Resilience Seminar II  
1 Credit  
Offered As Demand Warrants  
Provides a forum for new students of the Resilience and Adaptation graduate program to explore issues of interdisciplinary research relevant to sustainability. The seminar provides support to each student planning his/her summer internship and preparing and presenting a thesis research prospectus.  
**Prerequisites:** ANTH F647, BIOL F647, ECON F647 or NRM F647; ANTH F667, BIOL F667, ECON F667 or NRM F667.  
**Cross-listed with** ANTH F668; BIOL F668; NRM F668.  
**Lecture + Lab + Other:** 2 + 0 + 0

ECON F670  Seminar in Research Methodology  
1 Credit  
Offered As Demand Warrants  
Philosophy of research and importance of the scientific method to solution of research problems.  
**Prerequisites:** Graduate standing.  
**Lecture + Lab + Other:** 1 + 0 + 0

ECON F692  Seminar  
1-12 Credits  
Offered As Demand Warrants  
**Lecture + Lab + Other:** 0 + 0 + 0

ECON F698  Non-thesis Research/Project  
1-9 Credits  
Offered As Demand Warrants  
**Lecture + Lab + Other:** 0 + 0 + 0

ECON F699  Thesis  
1-9 Credits  
Offered As Demand Warrants  
**Lecture + Lab + Other:** 0 + 0 + 0