

Description of Courses

■ Undergraduate Program

BTM210 Microeconomics

This course is concerned with the understanding of basic principles in microeconomics. Microeconomics considers how individuals, firms, the government, and other organizations make choices. By the end of semester, students should understand the main logical arguments used by economist to describe how the world works, and be able to use these tools to analyze business and public policy problems.

BTM211 Macroeconomics

This course is concerned with the construction of macroeconomic theories that can explain and predict variations in aggregative (economy-wide) variables, such as GNP, unemployment, the general price level, interest rates, growth rates, and the exchange rate. The course material and class organization stress the development of the tools and background necessary for your field courses.

BTM301 Econometrics

This course will provide students with an opportunity to learn basic methods of multiple regression analysis. Estimation and testing hypotheses are the primary concerns of this course. Topics covered in this course are multiple regression, structural change, and time series analysis.

BTM311 Intermediate Microeconomics

Intermediate Microeconomics offers a rigorous, analytical study of microeconomics. It is designed to give students a deeper understanding of the way our society allocates resources. While it is intended for students who have already taken the microeconomic principles course, that requirement can be waived with the permission of the instructor. The course begins by exploring the consumption and production decision of our society in competitive markets. It continues by looking at the welfare benefits of markets through a general equilibrium analysis. It investigates the impact that various market structures have on equilibrium outcomes, including monopoly, oligopoly, and monopolistic competition. Depending on the semester, additional topics can include, game theory, externalities, asymmetric information, and decision-making under uncertainty. This course provides the necessary theoretical background for students to continue their studies at a top graduate school in economics.

BTM312 Intermediate Macroeconomics

This course introduces mathematical macroeconomic models to understand the broad movements in the global economy. Key topics include long-run economic growth, technological change, booms and recessions, unemployment, inflation, interest rates, monetary and fiscal policy, and economic inequality. The Solow growth model, endogenous growth models, DSGE (Dynamic Stochastic General Equilibrium), and search and matching models in the labor market will be covered. By the end of the course, students should be able to read and understand the discussions of macroeconomic issues in *The Economist*, the *New York Times*, the *Wall Street Journal*, or the economic reports from the Bank of Korea.

BTM402 International Economics

The Theory and Policy of International Economics is a natural extension of the principles of economics in a globalized environment. The class is basically a combination of the study of theory and real world application. Occasionally, the group and individual presentation and debate will be introduced.

BTM408 Economics of Technology and Innovation

This course focuses on the effects of technology development on social welfare, social system, industrial structure, firm behavior in terms of economics perspective. This course deals with topics such as technology and economic development, technology and firm innovation, technology

diffusion, technology innovation and policy.

BTM413 Industrial Organization

This course studies the application of microeconomic theory in market and industries. It analyzes market and industries in the paradigm of market structure-conduct-performance. It introduces various concepts of market structure and conduct: natural monopoly, contestable market, entry barrier, economies of scale and scope, firm integration, price discrimination, tied sale, resale price maintenance market foreclosure, and other restraints on transactions. And it studies regulatory issues associated with the efficient and optimal market performances of industries.

BTM415 Game Theory

The aims of this course is to equip the students with the basic tools of game theory. This unit develops the basic models of strategic behavior in modern microeconomics. It builds a framework for the analysis in markets where the traditional price theory fails. Central in development are choice under uncertainty, choice in strategic situations and choice under asymmetric information. The theories are applied to the analysis of oligopolistic markets, markets for insurance, the theory of actions and other applications.

BTM417 Financial Economics

Activities in financial markets have direct effects on individual's wealth, the behavior of business, and the efficiency of our economy. This course is designed to investigate (i) the role of money on business cycle and inflation, (ii) the structure of financial systems and the foreign exchange markets, and (iii) conduct of monetary policy and budget deficit. (iv) In addition, this course will introduce central concepts of financial economics.

BTM418 Network Economics

This course aims to understand basic principles of network economics and study applications of the principles to real economies and business issues. We introduce the network concept, structure, and principles including network externalities, critical mass, excess inertia and excess momentum, increasing returns world, positive feedback, path dependent process, and so on. We apply those principles to various economic, business, and policy issues; technology adoption, standardization, spatial pattern, network trade, discrepancy and instability, systems failure, synchronization, self-organizing, complex network theory, etc.

BTM484 Special Topics in Economics

This course explores special topics of current interest, which can vary from semester to semester. This course may not be offered every year.