

Undergraduate Courses

Spring Semester 2023

1. Economics courses

| No. | Course Code | Course name | Credits | Course Description |
|-----|-------------|---|---------|--|
| 1. | EE200 | Data Science for Economic Analysis | 3 | Prerequisites: 2nd year student or above. Learning to work with data. Topics include (1) data sampling and cleaning (2) data storage and management (3) exploratory data analysis (4) prediction based on statistical tools such as regression, classification and clustering (5) communication of results through visualization and summary statistics. Students learn through real-world examples using programs such as advanced MS Excel, Python or R. |
| 2. | EE401 | Political of Economics | 3 | Prerequisites: a) EE210 or b) EE211 and EE212 or c) EE213 and EE214 Analyzing the development of capitalism. Theories and methodology of different schools of Economic thought from classical political economics to Karl Marx's political economics, post-Marxist political economics. |
| 3. | EE406 | Contemporary Economic Issues | 3 | Prerequisites: EE211 and EE212 This course is a general introduction to the subject matter and methods of economics, through the investigation of specific contemporary economic issues such as economic growth, inequality, poverty, and environmental deterioration. The focus also is on how economists address these issues. |
| 4. | EE409 | Seminar in Political Economy and Economic History | 3 | Prerequisites: Having completed at least two 400-level (or the above level) courses in the field of Political Economics and Economic History, excluding EE400, EE404, EE406 and EE500. Seminar and research on specific topics in Political Economics and Economic History under the supervision of the lecturer. |
| 5. | EE211 | Principles of Microeconomics | 3 | Principles of microeconomics such as value, price, resource allocation, introduction to theories of consumption and production with an emphasis on factors determining supply and demand of goods and services, determination of price and efficiency of resource allocation in perfect and monopoly markets; competitive factor market and introductory concepts of market failures. |
| 6. | EE212 | Principles of Macroeconomics | 3 | Indicators, goals, and problems in Macroeconomics. Determination of national income, theories of aggregate consumption and aggregate investment, the accelerator principle, money markets, the theory of supply and demand for money, the joint equilibrium model of product and money markets (IS-LM model), the balance of payments, and fiscal and monetary policies as means to stabilize an economy. Collecting and managing Thai macroeconomic for analyzing economic conditions are introduced. |

| No. | Course Code | Course name | Credits | Course Description |
|-----|-------------|-------------------------------------|---------|---|
| 7. | EE311 | Microeconomic Theory | 4 | <p>Prerequisites: EE211 (or EE213) and MA216 (or MA211)</p> <p>Consumer behavior focusing on indifference curve analysis, intertemporal consumption, consumption and risks. Theory of production and cost, the birth of the firm using information cost, structure and behavior of imperfect competitive markets which are monopoly, monopolistic competition and duopoly markets. Introduction to game theory. Price setting in practice. Price determination in factor markets, general equilibrium analysis, welfare Economics, market failures and measures to correct.</p> |
| 8. | EE312 | Macroeconomic Theory | 3 | <p>Prerequisites: a) EE211 and EE212 or b) EE213 and EE214</p> <p>The model of joint equilibrium in product markets, money markets, and foreign exchange markets (the IS-LM-BP model); changes in equilibrium; product markets and labor markets; the model of aggregate supply and demand in closed and open economies; inflation, unemployment, and the Phillips curve; economic stabilization policies; growth theory, microfoundation of macroeconomics focusing on real business cycle model, new classical model, and new Keynesian model; applications of Macroeconomic theory to analyze economic situations.</p> |
| 9. | EE320 | Introductory Mathematical Economics | 3 | <p>Prerequisites: a) EE211, EE212 and MA216 (or MA211) or b) EE213, EE214 and MA 216 (or MA 211) (Credits will not be awarded to students who are taking or have completed EE421)</p> <p>Applying mathematical concepts and tools such as functions, equations, matrices, univariate and multivariate differential calculus, constrained and unconstrained optimization, and basic integral to understand the relationship between different economic variables and explain concepts of Microeconomic theory and Macroeconomic theory. An emphasis will be placed on relationships between total, average, and marginal functions, the analyses of elasticity, market equilibrium, impacts of taxation, and the basic input-output model.</p> |
| 10. | EE325 | Introductory Econometrics | 3 | <p>Prerequisites: EE211 (or EE213), EE212 (or EE214), MA216 (or MA211) and ST216 (or ST211) (Credit will not be awarded to students who are taking or have completed EE425)</p> <p>Applying statistical methods and economic theories to analyze economic data using the simple and multiple regression. Topics also include dummy variable, multicollinearity, heteroscedasticity, autocorrelation, and specification error. This course focuses on how to choose the appropriate tool for an empirical study, with the emphasis placed on using some econometric softwares.</p> |
| 11. | EE302 | History of World Economy | 3 | <p>Analyzing the history and development of world capitalism. The importance of world economy is emphasized by selected topics such as the birth of capitalism, the Industrial Revolution, colonization, the Great Depression of the 1930s, the collapse of the Soviet Union, the development of Chinese and East Asian economies, the Oil Crises, and the World Financial Crises.</p> |

| No. | Course Code | Course name | Credits | Course Description |
|-----|-------------|---|---------|--|
| 12. | EE361 | Economics of CLMV Countries | 3 | Prerequisites: a) EE210 or b) EE211 and EE212 or c) EE213 and EE214 Economic development in the cluster of Cambodia, Laos, Myanmar, and Vietnam (CLMV) countries. The transformation of their economic structure. The roles of public and private institutions along with other economic, social, and political factors that contribute to their economic changes. The relationship between these economies and the world and Thai economies. |
| 13. | EE376 | Economics of Climate Changes | 3 | Prerequisites: EE210 or EE211 or EE213 Basic scientific knowledge on climate change. Greenhouse gas emissions and climate change mitigation. Concept of market failure and economic measures to support climate mitigation and technological development. Impacts of these measures on the economy, international trade and investment. Economics of climate change adaptation. International climate negotiation and cooperation. |
| 14. | EE412 | Macroeconomic Analysis | 3 | Prerequisites: EE312 and EE320 (or EE421) Macroeconomic theory with an emphasis on utilizing mathematical tools and dynamic framework to analyze economic issues, such as, general equilibrium and welfare analysis in modern Macroeconomics, analysis of long-term growth, analysis of short-term growth and fluctuations both theoretically and empirically, roles of government in the economy, modern concepts for macroeconomic policy analytical frameworks, and the other topics that the lecturer finds suitable. |
| 15. | EE416 | Behavioral Economics | 3 | Prerequisites: EE311 Concepts and frameworks in behavioral economics including comparative study of models for decision under uncertainty between mainstream economics and behavioral economics, empirical evidences that support behavioral economics, models that incorporate psychological and sociological factors for consumer and social behaviors, and other topics that the lecturer finds suitable. |
| 16. | EE426 | Econometrics 2 | 3 | Prerequisites: EE425 This course covers Maximum Likelihood estimation, panel data model, limited dependent variable model and the introduction to time series data focusing on univariate time series, forecasting, cointegration and error correction model. |
| 17. | EE431 | Economics of Financial Markets and Financial Institutions | 3 | Prerequisites: EE311 Money and capital markets at a micro-level; Financial assets, risks, and risk-bearing; The theory of equilibrium pricing of financial assets; Interest rate determination and structure of interest rates; Asymmetric information in financial markets; The study of financial institutions; Risk management of financial institutions; Behavior of financial institutions; Regulating financial institutions. |

| No. | Course Code | Course name | Credits | Course Description |
|-----|-------------|--|---------|--|
| 18. | EE432 | Monetary Theory and Policy | 3 | Prerequisites: EE312 The role of money in the economy; studying monetary policy's goals, tools, policy implementations, Transmission mechanisms of Monetary policy; Monetary policy and business cycles; monetary policy framework, exchange rate targeting and inflation targeting; The role of the Central Bank; The interaction between monetary and fiscal policies; The role of monetary policy in the open economy. |
| 19. | EE439 | Seminar in Monetary and Financial Economics | 3 | Prerequisites: Having completed at least two 400-level (or the above level) courses in the field of Monetary and Financial Economics. Seminar and research on topics in Monetary and Financial Economics under the supervision of the lecturer. |
| 20. | EE442 | Economics of Public Revenue | 3 | Prerequisites: EE212 (or EE214) and EE311 The course analyses the structure and composition of government (national and local) revenue, through analysis of tax burden and incidence, and tax effects upon efficiency and equity. The course looks at the empirical effects of tax policies on the economy as a whole, and various individual behaviors such as decisions about work and leisure, tax avoidance and evasion, investment, savings and consumption. The analysis also includes the effects of deficit finance and fiscal decentralization (local revenue, grants and local debt). The application of these tools to selected contemporary topics (social security, healthcare and education financing). Additionally, the class will explore the politics and economics of tax reforms. |
| 21. | EE451 | International Trade Theory and Policy | 3 | Prerequisites: EE311 International trade theories. Outcomes from trade, such as production outcome, commodities prices, resource allocation, and prices of the factors of production. Analysis of the policies and regulations in international trade. Economic integration. Foreign investment. |
| 22. | EE452 | International Monetary and Financial Economics | 3 | Prerequisites: EE312 The balance of payments adjustment mechanism. Foreign exchange markets. International capital flows. The evolution of an international monetary system. International monetary problems encountered by developing countries, including Thailand. Financial crises as experienced by Thailand and the rest of the world. |

| No. | Course Code | Course name | Credits | Course Description |
|-----|-------------|---|---------|--|
| 23. | EE461 | Development Microeconomics | 3 | Prerequisites: EE311 Concepts and measurements of poverty and inequality. The theories of justice for analyzing public policies related to these issues. Microeconomic theories related to household decisions and behaviors, as well as market failures in developing countries. Public policies on development issues such as health; education; population; workforce allocation of households in agriculture and non-agriculture sectors, as well as formal and informal sectors; migration; entrepreneurship of the households; households' financial and risk management tools; microfinance; innovations and other interesting issues related to poverty reduction, etc. |
| 24. | EE463 | Globalization and International Development | 3 | Prerequisites: a) EE211 and EE212; or b) EE213 and EE214 Concept and development of globalization in the context of after the World War II. Formation of the New International Economic Order (NIEO). Global organizations. Multinational corporations. International cooperation. Political economy of dependency. Debates on contribution and impacts of globalization on the local economy. Contemporary transnational development issues. Roles of international development organizations e.g. the United Nations, World Bank, International Monetary Fund (IMF), etc., in bridging the global north and the global south or within the south countries through the official development assistance (ODA), development loan, or development projects. Analysis of patterns, factors of success and failures of past international development projects. Basic techniques for development project evaluation. |
| 25. | EE465 | Sustainable Development | 3 | Prerequisites: EE212 (or EE214) and EE311 Development of sustainable development approach under context of socio-politico-economic development at different levels. Sustainable development crises at global level and in Thailand. Definitions and fundamental ideas regarding Sustainable Development and contemporary debates. Other approaches related to sustainable development and their critiques, such as Gross National Happiness (GNH), Sufficiency Economy Philosophy, Green Growth, etc. Economic theories related to sustainable development, such as the analysis of externalities, public goods, common-pool resources, ecological economics, Green Economy, and economic measures for sustainable development. Policies and indicators related to sustainable development at global level, particularly the Sustainable Development Goals (SDGs). Challenges and obstacles to achieve sustainable development. |
| 26. | EE469 | Seminar in Development Economics | 3 | Prerequisites: Having completed at least two 400-level (or the above level) courses in Development Economics, excluding EE460 and EE468. Seminar and research on topics in Development Economics under the supervision of the lecturer. |

| No. | Course Code | Course name | Credits | Course Description |
|-----|-------------|--|---------|--|
| 27. | EE475 | Natural Resources Economics | 3 | Prerequisites: EE311 Economic theories and tools used for natural resource allocation. Concepts of scarcity and economic rent of natural resources. Allocation of natural resource among current users as well as intertemporal allocation. Market failure due to deficiencies in the property rights system. Government policies and tools for natural resource management and their impacts. |
| 28. | EE481 | Industrial Economics | 3 | Prerequisites: EE311 This course studies behaviors of firms under imperfectly competitive markets. It covers the structure–conduct–performance (SCP) paradigm, which examines the relationship among market structure, firms’ conducts and their performance. It also covers firms’ decision on operation, resource allocation, as well as firm’s strategic actions. Price theory and game theory will be used to analyze issues such as pricing, research and development, advertising, and firms’ decision under imperfect information. |
| 29. | EE482 | Industrialization Role of Public and Private Sectors | 3 | Prerequisites: EE312 Study of Economic theories relating to Industrial development. The importance of the industrial sector and industrial development for Thailand’s economic system. Evolution of industrial policy in Thailand. The role of public and private sectors in the industrial development as well as in developing new economy such as knowledge-based economy, digital economy, service economy and so on. |
| 30. | EE484 | Empirical Industrial Organization | 3 | Prerequisites: (a) EE311 and EE325 (or EE425) or (b) with the consent of the lecturer. Empirical approach in industrial economics and application of econometric analysis in industrial economics theory i.e., Estimation of demand and production functions, Measurement of market power, Analysis of firm’s strategic behavior, Vertical and horizontal competition, Firm's entry decisions, contract and learning. Measurement of firm performance by efficiency and productivity indicators. |
| 31. | EE486 | Business Economics | 3 | Prerequisites: EE311, EE312 and EE325 (or EE425) Theories and tools applicable for analysis of business problems and solutions, such as the application of economic concepts to forecast economic and industrial conditions, determination of business strategy, and decision-making. |
| 32. | EE489 | Seminar in Industrial Economics | 3 | Prerequisites: Having completed at least two 400-level (or the above level) courses in field of Industrial Economics Seminar and research on topics in Industrial Economics under the supervision of the lecturer. |

2. Non-Economics courses

| No. | Course Code | Course name | Credits | Course Description |
|-----|-------------|--------------------------------------|---------|---|
| 1. | MA216 | Calculus for Social Science 1 | 3 | Limits and continuity of one variable functions, derivatives of algebraic functions and transcendental functions, implicit differentiation, higher order derivatives, Roll's theorem, the mean value theorem, applications of derivative for determining limits and maximum and minimum of functions, differentials and its applications, antiderivatives, indefinite integrals and integration, definite integrals and application of area solving, functions of several variables, limits and continuity of functions of several variables, partial derivatives, the chain rule, total differential and its applications. Note : There is no credit for students who are currently taking or have earned credits of MA111 or MA211 or MA218 or AM101 |
| 2. | ST216 | Statistics for Social Science 1 | 3 | No credits for students who passed or studying TU 155 Introduction to descriptive statistics; index numbers; unconditional and conditional probability; random variables and probability distribution; unconditional and conditional expectations; elementary sampling and sampling distribution; estimation and hypotheses testing for one population; statistical package results interpretation. |
| 3. | AC201 | Fundamental Accounting | 3 | The basic principles, concepts, and procedures for collecting and recording accounting information; preparation and analysis of financial reports; accounting cycle; accounting and disclosure for assets, liabilities, and owners' equity. |
| 4. | BA291 | Introduction to Business | 3 | Understand and able to apply business organization, structure, and its existence in general, including types of ownership, business administration process and activities, especially in crucial business function i.e. marketing, finance, accounting to give general ideas of various business functions. This course allows participants to gain comprehension in different activities of each business type through real business experience. |
| 5. | FN211 | Financial Mathematics and Statistics | 3 | Essentials of statistics and mathematics for financial applications; basic statistics, the concept of risk and return, probability, regression analyses, basic calculus (e.g. introduction to derivatives, integration, and integral), optimization, and basic matrices. |
| 6. | FN311 | Financial Management | 3 | Prerequisites:: FN201 and BA204 or (ST211 and ST212) or (ST216 and ST217) or (ST218 and ST319) Theoretical concepts of corporate financial management applied to resolve financial problems and issues encountered by management in the real world of business; the management of asset structure and financial mix; the application of financial models and instruments on managing the assets, liabilities and equities, valuation, the costs of capital, capital structure, capital budgeting under risk, leasing, the concepts of agency problems and corporate governance. |

| No. | Course Code | Course name | Credits | Course Description |
|-----|-------------|---------------------------------|---------|--|
| 7. | FN312 | Investments | 3 | Prerequisites: FN201 and FN211 Valuation methods for fixed income instruments, equity instruments, options, and futures contracts; risk and return measurement of individual securities and portfolios, the determinants of risk and return. |
| 8. | FN313 | International Finance | 3 | Prerequisites: FN201, FN211 and EC214 The financial management for international business and its international economic environment: international monetary system, the balance of current account, the balance of payment, the foreign exchange market; the application of financial instruments and derivatives in the international financial risk management, the roles of international financial institutions, such as the International Monetary Fund (IMF), the World Bank, and international financial corporations. |
| 9. | FN411 | Derivatives Analysis | 3 | Prerequisites: FN312 Fundamental principles of derivatives, including futures, forward contracts, options, warrants, swaps, and real options, derivatives pricing models, strategies for speculating or hedging. |
| 10. | FN424 | Investment Banking | 3 | Prerequisites: FN311 Investment banking business; principles of value creations for firms and investors by mergers and acquisitions and business reorganizations; variety of investment banking activities, debt restructuring, initial public offering, and venture capital; applications of financial management and cases both in Thailand and abroad. |
| 11. | MK311 | Consumer Behavior | 3 | Prerequisites: FN311 Investment banking business; principles of value creations for firms and investors by mergers and acquisitions and business reorganizations; variety of investment banking activities, debt restructuring, initial public offering, and venture capital; applications of financial management and cases both in Thailand and abroad. |
| 12. | MK316 | Distribution Channel Management | 3 | Prerequisites: MK 201 A study of distribution channel systems for traditional and modern trade, their roles, constraints on their management, and their integration into marketing strategy. Analysis of dynamic market factors, design and distribution of channels for effective and efficient management distribution networks, and strategic deployment of multi-channel marketing decisions to gain competitive advantages. Focus is on the roles, attitudes, and behavior of channel members, dimensions of channel power, management of channel conflict, channel incentive programs, coordination of channel relationships, and management of indirect channels. Particular attention is paid to the development, control, and evaluation of a distribution channel in both consumer and business markets |

| No. | Course Code | Course name | Credits | Course Description |
|-----|-------------|----------------------------|---------|---|
| 13. | MK319 | Digital Marketing Strategy | 3 | <p>Prerequisites: MK312</p> <p>Digital marketing strategy course is to educate students to understand how to applying digital technologies to craft marketing strategies in responding to consumer and business markets in the digital era. The content of this course contains four parts that are issues and challenges of digital technologies in marketing competitive landscape, leveraging digital technologies to gain competitive advantage, digital marketing strategy formulation, and designing metrics to measure the success of digital marketing strategy</p> |
| 14. | MK321 | Entrepreneurial Marketing | 3 | <p>Prerequisites: MK312</p> <p>A study of key entrepreneurial marketing theories, concepts, and strategies that can be applied to both established and new ventures operating in fast-changing, volatile business environments. The course begins with a discussion of the evolution of the interface between marketing and entrepreneurship and continues with an exploration of the underlying elements of entrepreneurial marketing. The main emphasis of this course is on how to proactively identify, evaluate, and exploit market opportunities in order to acquire and retain profitable customers. The course also puts emphasize on the concept of effectual perspective of entrepreneurship. Through a series of hands-on case studies, students will learn how to formulate entrepreneurial marketing strategies using innovative approaches to risk management, resource leveraging, and value creation.</p> |
| 15. | MK322 | Retail Management | 3 | <p>Prerequisites: Have earned credits of MK201 or MK202</p> <p>A study of retail business management. Topics include roles and institutions related to retail business, understanding consumer behavior and market competition to determine effective retailing strategy, location selection, organization and human resources management, supply chain and IT for retail management, merchandise planning, purchasing system, retail branding, retail pricing, and promotion program, including store management, store design, store layout for product placement, services, and retail sales techniques. This course also discusses international retailing and electronic retailing.</p> |
| 16. | MK326 | International Marketing | 3 | <p>Prerequisites: MK201</p> <p>A study of concepts and ways in doing international marketing including exporting, importing, foreign direct investment, globalization and factors affecting international marketing. The course covers how to gain consumer insights across international markets and translate them into appropriate marketing programs. By acting as an international marketing managers, students should be able to understand the linkages of the dynamic international environments, international opportunities, and international marketing strategies through assignments, case studies, and group projects.</p> |

| No. | Course Code | Course name | Credits | Course Description |
|-----|-------------|--|---------|---|
| 17. | MK495 | Special Topics in Marketing 2 (Machine Learning for Marketers) | 3 | Prerequisites: Marketing major, fourth-year student status or approved by the instructor Philosophy, concepts, principles, tools, innovations, recent trends, and recent developments in Marketing that benefit students' thinking and future careers. |
| 18. | IS01 | Digital Technology for Business | 3 | The key forces for change in business, how digital technology disrupts traditional business, digital business transformation, rethinking and redesigning of digital business, the new technology, applications, data and information platforms of digital business, managing digital business IT/IS infrastructure, Cyber security awareness and technology, and understanding how to use software for planning and decision making support of digital business operations in the agile environment. |
| 19. | OM201 | Operations Management | 3 | Study of concepts, techniques and tools to design, analyze, and improve core operational capabilities, and their application to a broad range of industries. Topics include operations strategy, productivity, product/service design, process design, quality management, inventory management, project management, supply chain management, operational performance measurement and operations for sustainability. |
| 20. | TU103 | Life and Sustainability | 3 | This course provides an introduction to the importance of life-cycle systems perspectives in understanding major challenges and solutions to achieving more sustainable societies in this changing world. Students will learn about the relationship between mankind and the environment in the context of energy and resource use, consumption and development, and environmental constraints. Furthermore, an examination of social conflict and change from the life-cycle perspective will be used to develop an understanding of potential solution pa |
| 21. | TU104 | Critical Thinking, Reading and Writing | 3 | Development of critical thinking through questioning, analytical, synthetic and evaluation skills. Students learn how to read without necessarily accepting all the information presented in the text, but rather consider the content in depth, taking into account the objectives, perspectives, assumptions, bias and supporting evidence, as well as logic or strategies leading to the author's conclusion. The purpose is to apply these methods to students' own persuasive writing based on information researched from various sources, using effective presentation techniques. |
| 22. | TU106 | Creativity and Communication | 3 | Creative thought processes, with critical thinking as an important part, as well as communication of these thoughts that lead to suitable results in social, cultural and environmental contexts, at personal, organisational and social levels |
| 23. | TU116 | Man and Arts, Visual Art, Music and Performing Arts | 3 | Development of English listening, speaking, reading and writing skills, focusing on the ability to hold a conversation in exchanging opinions, as well as reading comprehension of academic texts from various disciplines related to students' field of study. |

| No. | Course Code | Course name | Credits | Course Description |
|-----|-------------|----------------------|---------|---|
| 24. | TU122 | Law in Everyday Life | 3 | To study general aspects of law as correct patterns of human conduct in society. To equip learners with basic principle of public law (rules of law), and its values which are associates with citizens' moral core. To provide basic knowledge in public law and private law, involving the issues of rights and duties, dispute settlement, Thai Justice procedures, the usage and interpretation of law principles, with an emphasis on case studies in our daily lives. |