Applied Economics Degree Description and Summary

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School of Business

Bachelor of Science Degree

The Bachelor of Science program in Applied Economics is a comprehensive course of study that prepares students for careers in business, financial institutions, national, state, and local government, public and private research organizations and nonprofit organizations. Consistent with the mission of the College, the program trains students to be real-life problem solvers so that upon graduation they are ready to be employed in entry and junior-level positions in business and industry, the public sector, and non-profit sector.

Graduates will have the skills and abilities to meet the diverse needs of regional, national, and international employers in both the private and public sectors, working in occupations such as entry-level economist, quantitative analyst, business analyst, financial analyst, regional planner, manager, and research analyst. The program exposes students to a broad spectrum of economic concepts and applications, providing them with a strong background from which to pursue graduate study in economics and the social sciences, business and finance, law, public administration, journalism, and education.

Students must complete 60 hours in the liberal arts (inclusive of the general education core). In their first two years of the program, students will complete their general education requirements including mathematics, the two introductory courses in economics, and begin to take courses in the economics core.

The program culminates with a capstone course sequence of Economics Research and Reporting followed by Applied Economic Analysis/Senior Project. In the first course, students receive extensive instruction in the methods and techniques of economic research and report writing, including data and statistical analysis, and the generation and presentation of reports for the general public. Students, in Applied Economic Analysis/Senior Project are asked to undertake, complete, and present the results of an applied research project.

Typical Employment Opportunities:

- Market Research Analysts
- Quantitative Analysts for National, State, Local Governments
- Financial Analysts for Banks and Other Financial Institutions
- Budget Analysts
- Insurance Agent
- Data Analysts

Applied Economics (BS) Program Objectives:
• Graduates will be able to understand basic economics principles, important economic issues, and major economic institutions.
• Graduates will be able to comprehend economic concepts and analytical techniques and apply them to a wide variety of economic issues and problems of the U.S. and world economies.
• Graduates will be trained to read and understand economic literature.
• Graduates will have the opportunity to compile and analyze complex economics data to address real-life economics issues.
• Graduates will be trained to write economics reports and present economic analysis in comprehensible terms.

Fall 2018- Subject to Revision

Liberal Arts and Sciences (36 credits)

EGL 101 Composition I: College Writing (GE) 3
EGL 102 Composition II: Writing About Literature 3
Speech (any SPE Course) (GE) 3
Humanities (GE) 3
The Arts (GE) 3
American/ Other World / Western Civilization (GE) 6
Foreign Language (GE) 3
ECO 156 Principles of Economics - Macro (GE) 3
ECO 157 Principles of Economics - Micro (GE) 3
Natural Science (GE) 3
MTH 110 Statistics (GE) 3

Additional Required Courses (10 credits)

MTH 129 Precalculus with Applications or MTH 117 Precalculus Modeling for Life and Social Sciences 4
Social Sciences Electives (ANT, POL, PSY, SOC) 6

Required: Economics (33 credits)

ECO 250 Quantitative Analysis for Economics 3
ECO 260 Intermediate Microeconomics OR ECO 262 Managerial Economics 3
ECO 270 Intermediate Macroeconomics OR ECO 255 Money and Banking 3
ECO 380 Econometrics 3
ECO 490W Economic Research and Reporting 3
ECO 491 Applied Economic Analysis /Senior Project 3
Upper level Economics Electives (300 level and above) 15
Additional Electives (41 credits)
Additional free electives 41
Total Credits: 120

Degree Type: BS
Total Required Credits: 120

1. Students must take at least two 400 level Economics electives
2. Students must receive a grade of C or better in required core courses.

Course Descriptions

**EGL 101 Composition I: College Writing (GE)**
This is the first part of a required sequence in college essay writing. Students learn to view writing as a process that involves generating ideas, formulating and developing a thesis, structuring paragraphs and essays, as well as revising and editing drafts. The focus is on the development of critical and analytical thinking. Students also learn the correct and ethical use of print and electronic sources. At least one research paper is required. A grade of C or higher is a graduation requirement. Note: Students passing a departmental diagnostic exam given on the first day of class will remain in EGL 101; all others will be placed in EGL 097. Prerequisite is any of the following: successful completion of EGL 097; an SAT essay score (taken prior to March 1, 2016) of 7 or higher; an SAT essay score (taken after March 1, 2016) of 5 or higher; on-campus placement testing. Credits: 3

**EGL 102 Composition II: Writing About Literature**
This is the second part of the required introductory English composition sequence. This course builds on writing skills developed in EGL 101, specifically the ability to write analytical and persuasive essays and to use research materials correctly and effectively. Students read selections from different literary genres (poetry, drama, and narrative fiction). Selections from the literature provide the basis for analytical and critical essays that explore the ways writers use works of the imagination to explore human experience. Grade of C or higher is a graduation requirement. Prerequisite(s): EGL 101 Credits: 3

**ECO 156 Principles of Economics - Macro (GE)**
This course is designed to introduce classic macroeconomic issues such as unemployment, inflation, national income and economic growth. The course will provide a unified framework to address these issues and to study the impact of different policies, such as monetary and fiscal policies, on the aggregate behavior of the economy. Analytical tools will be used to understand the experiences of the United States and other countries, and to address how current policy initiatives affect their macroeconomic performance. Credits: 3

**ECO 157 Principles of Economics - Micro (GE)**
This course introduces students to fundamental economic concepts and theory, including demand, supply, and the formation of equilibrium prices in product and resource markets. Students will learn a specific set of analytical tools as well as how to apply them to current policy issues. In addition, the course offers an introduction to applied fields such as industrial organization (market structures), labor economics, international trade, and market failure. Credits: 3

**MTH 110 Statistics (GE)**
Basic concepts of probability and statistical inference. Included are the binominal, normal, and chi-square distributions. Practical applications are examined. Computer assignments using Minitab form an integral part of the course. Prerequisite(s): MP2 or MTH 015 Credits: 3

MTH 129 Precalculus with Applications or MTH 117 Precalculus Modeling for Life and Social Sciences
In this course, the topics introduced in College Algebra course will be extended. The course will provide a comprehensive study of functions, which are the basis of calculus and other higher-level mathematics courses. The students will study the properties, graphs, and some applications of polynomial, rational, inverse, exponential, logarithmic, and trigonometric functions. Note: Students completing this course may not receive credit for MTH 117. Prerequisite(s): MP3 or MTH 116 Credits: 4

ECO 250 Quantitative Analysis for Economics
This course introduces students to basic mathematical techniques used in economic analysis. It applies differential calculus and linear algebra to economic analysis. Topics include: functions, equations in economics, constrained optimization, partial differentiation, and linear algebra. Prerequisite(s): ECO 156 or ECO 157 and (MTH 117 or MTH 129) Corequisite(s): MTH 117 or MTH 129 (to be taken before ECO 250 or simultaneously) Credits: 3

ECO 260 Intermediate Microeconomics OR ECO 262 Managerial Economics
This course provides students with a critical examination and introduction to the analysis of markets, demand theory, production, theory of the firm, market structure, general equilibrium and welfare analysis, and introductory game theory. The course introduces students to introductory modeling and mathematical methods used in microeconomics to model and estimate demand relationships, production functions, market behavior, and risk and uncertainty. Prerequisite(s): ECO 157 and (MTH 117 or 129) Credits: 3

ECO 270 Intermediate Macroeconomics OR ECO 255 Money and Banking
Study of aggregate economic analysis. With attention to the determination of the level of income, employment, and inflation (IS-LM); Fiscal and monetary stabilization policies critically examines both theories, and the policies associate with them; the macroeconomic implications of fixed and flexible exchange rates in the presence of international capital mobility supply-sided economics. Prerequisite(s): ECO 156 and (MTH 117 or MTH 129) Credits: 3

ECO 380 Econometrics
Students will learn and apply statistical methods used in empirical economic analysis. The course will cover the following topics: the fundamentals of probability and statistics, hypothesis testing, multivariate linear regression using Ordinary Least Squares (OLS), the statistical properties of OLS under less than ideal circumstances, the use of dummy variables, and specification analysis. Prerequisite(s): MTH 110 and (MTH 117 or MTH 129) and (ECO 156 or ECO 157) and Junior level status. Credits: 3

ECO 490W Economic Research and Reporting
This course introduces students to the methods and techniques of economic analysis, data and statistical analysis, interpretation of results, documentation, article preparation, and the report presentation. This is a writing-intensive course. Note: Students cannot get credit for ECO 490 and 490W; ECO 490W can be used to fulfill the writing intensive requirement. Note: Offered at the discretion of the Economics Department Prerequisite(s): ECO 260 or ECO 262 and (ECO 270 or ECO 255) and ECO 250 and ECO 380 and EGL 101 with a grade of C or higher Credits: 3

ECO 491 Applied Economic Analysis /Senior Project
This course is a follow-up to the economic research and reporting course. Its goal is to prepare the student to conduct independent research in consultation with their advisor, students will develop a senior project in an area of current economic
interest. They will participate in seminar and present their research, culminating in a completed report and presentation on their research topic. Prerequisite(s): ECO 490 or 490W Credits: 3

Admission to Farmingdale State College - State University of New York is based on the qualifications of the applicant without regard to age, sex, marital or military status, race, color, creed, religion, national origin, disability or sexual orientation.