Economics

Degree Offered

• Bachelor of Arts

Nature of the Program

The Department of Economics offers two majors in economics: one through the College of Business and Economics and the other through the Eberly College of Arts and Sciences. The College of Business and Economics grants a bachelor of science in economics and the Eberly College of Arts and Sciences grants a bachelor of arts with a major in economics.

The program leading to the B.A. degree is designed for students who wish to combine fundamental training in economics with a liberal arts education. In addition to the general education and related requirements, students have in excess of forty credit hours of unrestricted electives.

Economics students are taught to identify the costs and the benefits of a decision, which are often not obvious. The economist has the skill to identify the real consequences of a decision. That skill is valued highly in many aspects of business and government. Economics is a useful major for anyone interested in a career in banking, business, foreign service, law, public policy, and any other field in which the ability to make or analyze decisions is important. The demand for people with degrees in economics, both at the graduate and undergraduate levels, is high. In recent years firms such as Amazon and Microsoft have hired a number of economists to improve pricing, strategy, and evidence-based decision-making within the company.

Students who earn a degree in the Eberly College of Arts and Sciences must complete the University requirements, the College requirements for their specific degree program, and their major requirements.

Minors

All students have the possibility of earning one or more minors; for more information, please consult the list of all available minors and their requirements (http://catalog.wvu.edu/undergraduate/minors). Please note that students may not earn a minor in their major field.

Certificate of Global Engagement

Students in the Eberly College, regardless of their major, can earn a Certificate of Global Engagement. Completion of the Certificate demonstrates the student’s knowledge of diverse cultures, as well as the ability to communicate and interact effectively with people of different cultural backgrounds. Students will be required to apply their knowledge of contemporary issues and global social contexts to their course work and their broader citizenship. For details regarding Certificate requirements, please visit the Eberly College page (http://catalog.wvu.edu/undergraduate/eberlycollegeofartsandsciences/#otherdegreeext).

FACULTY

CHAIR

• Joshua Hall - Ph.D. (West Virginia University)
  Public Economics, Public Choice, Urban and Regional Economics

PROFESSORS

• Roger Congleton - Ph.D. (Virginia Polytechnic Institute and State University)
  Public Economics, Public Choice, Constitutional Political Economy
• Joshua Hall - Ph.D. (West Virginia University)
  Public Economics, Public Choice, Urban and Regional Economics
• Brad Humphreys - Ph.D. (Johns Hopkins University)
  Urban and Regional Economics, Sports Economics
• Feng Yao - Ph.D. (Oregon State University)
  Theoretical Econometrics, Applied Econometrics

ASSOCIATE PROFESSORS

• Arabinda Basistha - Ph.D. (University of Washington)
  Empirical Macroeconomics, International Finance
• John Deskins - Ph.D. (University of Tennessee)
  Public Economics
• Bryan McCannon - Ph.D. (Pennsylvania State University)
  Public Economics, Public Choice, Law and Economics
• Shuichiro Nishioka - Ph.D. (University of Colorado at Boulder)  
  International Trade, Economic Development  
• Adam Nowak - Ph.D. (Arizona State University)  
  Applied Econometrics, Urban and Regional Economics  
• Eric Olson - Ph.D. (University of Alabama)  
  Empirical Macroeconomics, Monetary Economics, Financial Economics  
• Jane Ruseski - Ph.D. (Johns Hopkins University)  
  Health Economics, Sports Economics  
• Scott Schuh - Ph.D. (Johns Hopkins University)  
  Applied Macro Theory, Monetary Economics  

ASSISTANT PROFESSORS  
• Daniel Grossman - Ph.D. (Cornell University)  
  Health Economics  
• Alexander Lundberg - Ph.D. (Emory University)  
  Law and Economics, Public Economics  

PROFESSORS EMERITI  
• Robert Britt  
• Brian Cushing  
• Clifford Hawley  
• Ming-jeng Hwang  
• Patrick Mann  
• Tom Witt  
• William Reece  

ADJUNCT PROFESSORS  
• Victor Chow  
• Randall Jackson  
• David Martinelli  
• Timothy Phipps  
• Peter Schaeffer  
• Paul Speaker  

Admissions  
• Incoming First-Time Freshmen and First-Time Transfer students are admitted directly to the Economics major.  
• Students admitted from other majors within WVU must be in good academic standing (2.0 GPA).  
• Students transferring from another institution must be in good academic standing (2.0 GPA).  

Click here to view the Suggested Plan of Study (p. 4)  

General Education Foundations  
Please use this link to view a list of courses that meet each GEF requirement. (http://registrar.wvu.edu/gef)  

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.  

General Education Foundations  
<table>
<thead>
<tr>
<th>F1 - Composition &amp; Rhetoric</th>
<th>3-6</th>
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</thead>
<tbody>
<tr>
<td>ENGL 101 &amp; ENGL 102</td>
<td>Introduction to Composition and Rhetoric</td>
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<tr>
<td>or ENGL 103</td>
<td>and Composition, Rhetoric, and Research</td>
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<td></td>
<td>Accelerated Academic Writing</td>
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<tr>
<td>F2A/F2B - Science &amp; Technology</td>
<td>4-6</td>
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<tr>
<td>F3 - Math &amp; Quantitative Reasoning</td>
<td>3-4</td>
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<tr>
<td>F4 - Society &amp; Connections</td>
<td>3</td>
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<tr>
<td>F5 - Human Inquiry &amp; the Past</td>
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</table>
Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

# Degree Requirements

Students must complete WVU General Education Foundations requirements, College B.A. requirements, major requirements, and electives to total a minimum of 120 hours. For complete details on these requirements, visit the B.A. Degrees tab on the Eberly College of Arts and Sciences page.

## Departmental Requirements for the B.A. in Economics

Students must earn a minimum of 24 semester hours of upper-division coursework in economics. Additional recommended courses can be determined in consultation with an economics adviser. More calculus and linear algebra are typically recommended for students.

- **Capstone Requirement**: The university requires the successful completion of a Capstone course. Economics majors are required to take ECON 481 in order to satisfy the Capstone requirement.

- **Writing and Communication Skills requirement**: Economics Bachelor of Arts students fulfill the Writing and Communication Skills requirement by completing ENGL 101 and ENGL 102 (or ENGL 103) and two SpeakWrite Certified Courses™: BCOR 299, and a 2nd course selected from: ASP 420, COMM 202, COMM 303, COMM 335, COMM 404, COMM 435, ENGL 214, ENGL 304.ENGL 305, GEOG 300, HIST 250, HIST 259, HIST 325, HIST 439, HIST 451, HIST 454, HIST 467, HIST 473, PHIL 321, PHIL 323, PHIL 346, POLS 230, POLS 240, POLS 250, PSYC 241.

- **Calculation of the GPA in the Major**: Economics majors must maintain a grade point average of 2.0 for all economics courses and earn a grade of C- or better in ECON 301 and ECON 302. If a course is repeated, all attempts are included in the calculation of the GPA, unless the course is eligible for the D/F repeat policy.

- **Residence Requirement**: Economics majors may take a maximum of nine of their thirty-three credit hours of economics courses out of residence. Transfer students must take a minimum of fifteen credit hours of upper-division economics courses in residence.

## General Education Foundations Requirements

<table>
<thead>
<tr>
<th>UNIVERSITY REQUIREMENTS</th>
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<tbody>
<tr>
<td>ECON 191</td>
<td>First-Year Seminar</td>
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<tr>
<td>GEF: number may vary depending on overlap</td>
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<thead>
<tr>
<th>COLLEGE REQUIREMENT</th>
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<tr>
<td>Foreign Language</td>
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<tr>
<td>Fine Arts Requirement</td>
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<td>Global Studies &amp; Diversity Requirement</td>
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<tr>
<th>DEPARTMENTAL REQUIREMENTS</th>
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<tr>
<td>Mathematics Requirement:</td>
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<td>Select one:</td>
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<tr>
<td>MATH 150</td>
<td>Applied Calculus</td>
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<tr>
<td>MATH 153</td>
<td>Calculus 1 with Precalculus &amp; and Calculus 1b with Precalculus</td>
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<tr>
<td>MATH 155</td>
<td>Calculus 1</td>
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<tr>
<th>Core Economics Courses</th>
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<tbody>
<tr>
<td>ECON 201</td>
<td>Principles of Microeconomics</td>
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<tr>
<td>ECON 202</td>
<td>Principles of Macroeconomics</td>
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<tr>
<td>ECON 225</td>
<td>Elementary Business and Economics Statistics</td>
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<tr>
<td>ECON 301</td>
<td>Intermediate Micro-Economic Theory</td>
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<td>ECON 302</td>
<td>Intermediate Macro-Economic Theory</td>
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<tr>
<th>Economics Electives</th>
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<tr>
<td>Select 15 hours of Economics at the 300 or 400 level</td>
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<tr>
<th>Capstone Requirement</th>
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Suggested Plan of Study

First Year

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<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
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<tbody>
<tr>
<td>ECON 191</td>
<td>1</td>
<td>ENGL 101 (GEF 1)</td>
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<tr>
<td>Foreign Language 101</td>
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<td>GEF 2</td>
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<td>Foreign Language 102</td>
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<tr>
<td>MATH 150 (GEF 3)</td>
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<td>ECON 225 (GEF 8)</td>
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<td>General Elective</td>
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Second Year

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<tr>
<th>Fall</th>
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<td>ENGL 102 (GEF 1)</td>
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<td>3 ECAS Fine Arts Requirement (GEF 6)</td>
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<tr>
<td>GEF 5</td>
<td>3</td>
<td>3 ECAS Global Studies &amp; Diversity Requirement (GEF 7)</td>
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<tr>
<td>Foreign Language 203</td>
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<td>Foreign Language 204</td>
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<tr>
<td>ECON 201 (GEF 8)</td>
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<td>3 ECON 202 (GEF 8)</td>
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<td>GEF 4</td>
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<td>General Elective</td>
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Third Year

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<tr>
<th>Fall</th>
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<tr>
<td>ECON 301</td>
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<td>3 ECON 302</td>
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<tr>
<td>ECON Elective 1</td>
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<td>3 ECON Elective 2</td>
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<tr>
<td>General Elective</td>
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<td>3 ECON Elective 3</td>
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Fourth Year

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<tr>
<th>Fall</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ECON Elective 4</td>
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<td>3 ECON 481 (Capstone)</td>
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<tr>
<td>ECON Elective 5</td>
<td>3</td>
<td>General Elective</td>
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Total credit hours: 120

Degree Progress

By the end of the 3rd semester in the major, students should have successfully completed:

- ECON 201 and ECON 202 with a minimum 2.5 GPA across those two courses
- MATH 126 with a C or higher.

By the end of the 4th semester in the major, students should have successfully completed:

- Calculus with a C or higher
- ENGL 101 and ENGL 102.

All majors must meet with ECON department adviser each semester. Students who do not meet their benchmarks may be removed from their major.
Major Learning Outcomes

ECONOMICS

Upon successful completion of the B.A. degree, Economics majors will demonstrate:

1. Ability to use supply and demand to analyze how world events affect market equilibrium prices and quantities.
2. Understanding of the theory of the firm and its implications for prices and production under different market structures.
3. Understanding of the role of prices and profits and losses in coordinating economic activity.
4. Ability to evaluate the efficiency of competitive market outcomes relative to alternative arrangements.
5. Ability to explain how GDP, the unemployment rate, inflation, interest rates, and economic growth are measured, to distinguish between real and nominal variables, and to explain the significance of these measures.
6. Understanding of and ability to analyze the determinants of long-run variations in national economic growth rates, wealth, and income.
7. Understanding of and ability to analyze the determinants of short-run fluctuations of economic variables over the business cycle.
8. Understanding of the goals and tools of monetary and fiscal policy.

COURSES

ECON 191. First-Year Seminar. 1-3 Hours.
Engages students in active learning strategies that enable effective transition to college life at WVU. Students will explore school, college and university programs, policies and services relevant to academic success. Provides active learning activities that enable effective transition to the academic environment. Students examine school, college and university programs, policies and services.

ECON 200. Survey of Economics. 3 Hours.
Introduction to the analysis of the economic system, pricing system, monetary system, determination of all national income and employment.

ECON 201. Principles of Microeconomics. 3 Hours.
PR: Sophomore standing. Introductory microeconomics analysis. Competitive behavior of firms, price determination, efficiency in production and equity in distribution. Pre-requisite(s) and/or co-requisite(s) may differ on regional campuses.

ECON 202. Principles of Macroeconomics. 3 Hours.
PR: ECON 201 or ARE 150. Introductory macroeconomics analysis, prerequisites are not enforced at WVUIT and Potomac State campuses. Aggregate demand and supply, saving, investment, the level of employment and national income determination, monetary and fiscal policy.

ECON 225. Elementary Business and Economics Statistics. 3 Hours.
PR: MATH 122 or MATH 123 or MATH 126 or MATH 129 or MATH 153 with a minimum grade of C- or MATH 150 or MATH 154 or MATH 155 or MATH 156 with a minimum grade of D-. Basic concepts of statistical models, distributions, probability, random variables, tests of hypotheses, confidence intervals, regression and correlation with emphasis on business and economics examples. (Equivalent to STAT 211.) (Not open to students who have completed STAT 215.).

ECON 293. Special Topics. 1-6 Hours.
PR: Consent. Investigation of topics not covered in regularly scheduled courses.

ECON 297. Research. 1-6 Hours.
Independent research projects.

ECON 301. Intermediate Micro-Economic Theory. 3 Hours.
PR: ARE 150 or ECON 201 with a minimum grade of C-. Consumer choice and demand; price and output determination of the firm, and resource allocation, under different market structures; welfare economics, externalities, public goods, and market failure; general equilibrium; other topics.

ECON 302. Intermediate Macro-Economic Theory. 3 Hours.
PR: (ECON 201 or ARE 150) and ECON 202 with a minimum grade of C- in all. Forces which determine the level of income, employment, output, the inflation rate, and the balance of trade. Particular attention to consumer behavior, investment determination, and government fiscal and monetary policy.

ECON 306. History of Economic Thought. 3 Hours.
PR: ECON 201 and ECON 202. Economic ideas in perspective of historic development.

ECON 331. Money and Banking. 3 Hours.
PR: ECON 201 and ECON 202. The U.S. monetary and banking system and its functional relationship to the economic system; monetary theory and policy.

ECON 411. Moral Foundations of Capitalism. 3 Hours.
PR: ECON 201 and ECON 202. Introduction to the moral foundations of capitalism. Compare and contrast alternative ethical systems using economic analysis when relevant.

ECON 421. Introduction to Mathematical Economics. 3 Hours.
PR: ECON 201 and ECON 202 and (MATH 150 or MATH 155 or MATH 156). Principal mathematical techniques including set operation, matrix algebra, differential and integral calculus employed in economic analysis. Particular attention given to static (or equilibrium) analysis, comparative-static analysis and optimization problems in economics.
ECON 425. Introductory Econometrics. 3 Hours.
PR: ECON 201 and ECON 202 and (ECON 225 or STAT 211). Analysis of economic models using basic econometric methods. Specification, computation, and interpretation of linear regression.

ECON 441. Public Economics. 3 Hours.
PR: ECON 202. Economic roles of the public sector. Particular attention to market failure, redistributing income, the financing of public sector activities, relationships between federal, state, and local governments, and public choice.

ECON 443. Law and Economics. 3 Hours.
PR: ECON 201. We will use the tools and reasoning of economics to study the legal system. Legal institutions have been developed to govern our lives. A formal analysis of the outcomes these institutions create is essential to construct policy and institutional changes to promote a prosperous society. We conduct this institutional analysis applying the tools of economics.

ECON 445. Government and Business. 3 Hours.
PR: ECON 201 and ECON 202. Examination of market structure, conduct, and performance. Analysis of market regulation including antitrust laws and regulation of monopolies.

ECON 451. International Economics. 3 Hours.

ECON 454. Comparative Economic Systems. 3 Hours.
PR: ECON 201 and ECON 202. Structure and processes of existing economic systems including capitalism, planned socialism, and market socialism. Problems encountered by economies in transition from planned socialism to capitalism.

ECON 455. Economic Development. 3 Hours.
PR: ECON 202. The problems, changes, and principal policy issues faced by non-industrialized countries.

ECON 461. Regional Economics. 3 Hours.
PR: ECON 201 and ECON 202. Analysis of the regional economy's spatial dimension, emphasizing interregional capital and labor mobility, the role of cities, objectives and issues of regional policy, lagging regions and Appalachia, growth poles, and regional growth and income distribution.

ECON 462. Urban Economics. 3 Hours.
PR: ECON 201 and ECON 202. Analyzes growth, decline, and socioeconomic problems of cities. Topics include the development of cities, urban spatial structure and land-use patterns, poverty and discrimination, housing, urban transportation and congestion, local government structure, and urban fiscal problems.

ECON 463. Applied Regional Economics Research. 3 Hours.
PR: ECON 202 and ECON 225 with a minimum grade of B- in each. This course offers a unique experiential learning opportunity in economics in which students will ultimately conduct, package, and publicly present the type of research that is regularly underway in the BBER. In particular, after learning the basics of econometrics and economic forecasting, students will compile and present an economic outlook report for a particular region in West Virginia.

ECON 465. Health Economics. 3 Hours.
PR: ECON 201 and (ECON 225 or STAT 211). Health economics applies the tools of economics and econometrics to issues of the organization, delivery and financing of health care.

ECON 471. Labor Economics. 3 Hours.
PR: ECON 201 and ECON 202. Labor market analysis. Topics include wage and employment determination, human capital theory, discrimination, unemployment, migration, effects of unions and government regulation, and life-cycle patterns of work.

ECON 481. American Economic History. 3 Hours.

ECON 482. Applied Economic Research. 3 Hours.
PR: Senior Economics major in final semester. Capstone course that introduces students to applied economic research. Completion and presentation of major research project required.

ECON 490. Teaching Practicum. 1-3 Hours.
PR: Consent. Teaching practice as a tutor or assistant.

ECON 491. Professional Field Experience. 1-18 Hours.
PR: Consent. (May be repeated up to a maximum of 6 hours.) Prearranged experiential learning program, to be planned, supervised, and evaluated for credit by faculty and field supervisors. Involves temporary placement with public or private enterprise for professional competence development.

ECON 493. Special Topics. 1-6 Hours.
PR: Consent. Investigation of topics not covered in regularly scheduled courses.

ECON 494. Seminar. 1-3 Hours.
PR: Consent. Presentation and discussion of topics of mutual concern to students and faculty.

ECON 495. Independent Study. 1-6 Hours.
Faculty supervised study of topics not available through regular course offerings.
ECON 496. Senior Thesis. 1-3 Hours.
PR: Consent.

ECON 497. Research. 1-6 Hours.
Independent research projects.

ECON 498. Honors. 1-3 Hours.
PR: Students in Honors Program and consent by the honors director. Independent reading, study or research.