Economics Courses for Freshmen and Sophomores

- First Semester Freshmen (or any student with appropriate pre-requisites) can take: Econ 104, 105 or 106.
  - Econ 105 is offered each semester, and Econ 104 is being offered in the Spring of 2019. Econ 106 is not being offered in the 2018-19 academic year.
  - If a student passes out of the Introductory Courses through performance on the placement exam, then any 200 level elective can be substituted for Econ 104/105/106.

- To be a major:
  - Econ 104, 105 or 106 should be taken by the end of the freshman year.
    - Or first semester sophomore year in a PINCH.
  - Econ 203/204 and either econ 300 or 302 should be completed by the end of the sophomore year.

Overview of the Haverford Economics Curriculum

Economics consists of a variety of theoretical approaches to understanding human behavior, social interactions, and economic performance, and a set of powerful methodological tools that can be used to test competing theories empirically. The economics curriculum at Haverford offers introductory and upper level courses both in theory and empirical methods, as well as numerous electives on a broad range of economic topics. Students with a wide range of interests—financial markets, the environment, politics and public policy, less-developed countries, income distribution and equity, the law, and international trade, to name just a few—will find much that is useful and stimulating by studying economics. One or two economics courses can be an important part of the liberal education of any college student, and students with a diverse set of interests find the economics major to be an engaging and rewarding course of study.

Introductory (100-level) courses. The Haverford Economics Department offers three introductory level courses, Econ 104: Intensive Introduction to Economics; Econ 105: Introduction to Economics; and Econ 106: Introduction to Economics with Calculus. These courses present basic principles of contemporary economic theory, and show how they can be used to make informed judgments concerning the allocation of resources, public policy choice, monetary policy, and fiscal stimulus. Econ 104 does not have a pre-requisite and is designed for students who have not taken any economics classes in high school and who have not placed above Mathematics 118. Econ 105 does not have a pre-requisite. Econ 106 requires that students have taken Mathematics 118, be taking it concurrently, or have passed out of it.

Intermediate theory courses. The core theory courses in Economics are Econ 300 (200 at Bryn Mawr): Intermediate Microeconomic Analysis and Econ 302 (202 at Bryn Mawr): Intermediate Macroeconomic Analysis. Both of these courses require Econ 118 or the equivalent of two semesters of college level calculus, as well as Economics 104, 105 or 106. Taking at least one 200-level economics elective before taking these intermediate theory courses is also beneficial. For Econ 300, a course in multivariate calculus is advised, but not required.

Statistical and econometric methods. The economics department offers two introductory statistics courses, Econ 203: Statistical Methods in Economics and Econ 204: Economic Statistics with Calculus. Both of these courses have Econ 104, 105 or 106 as a prerequisite, and either 203 or 204 is required for the Economics major. Econ 203 also has Math 118 as a prerequisite, though the experience of an additional semester of college mathematics is helpful. Econ 204 has a prerequisite of Math 121 or Math 215. With departmental approval, Math 203 can be substituted for Econ 203 or Econ 204. Economics 304, Introduction to Econometrics, is taken after Econ 203 or Econ 204, and introduces a variety of statistical and econometric techniques that are useful in economic applications. Econ 203, Econ 204, and Econ 304 all involve extensive analysis of real-world data using sophisticated statistical software.

Topics courses. A number of electives—courses that apply economic tools to particular topics such as labor markets, monetary policy, finance, development, and international trade—are offered at both the 200- and 300-levels. The prerequisites for these courses vary, but for 200-level courses they typically consist of Economics 104, 105 or 106 and for 300-level electives they typically consist of Econ 203 along with Econ 300 and/or Econ 302.
**Junior Research Seminars.** These 300 level electives are semester-long research seminars which junior majors take to develop their research skills. They are developed around a topic, for example labor market discrimination. In these small seminar courses professors guide their students as they examine current research in the area, learn the relevant research techniques, and conduct original projects. These electives, depending on the topic, will require Economics 203 or 204, Economics 300 and/or Economics 302, and Economics 304. These courses should be taken during fall or spring semester junior year and no later than first semester of senior year.

**Senior Research Seminar.** The culminating experience in the economics major is the senior thesis, written as part of a year-long senior research seminar. The first semester is a group seminar in which students learn salient research skills, listen to and critique work of guest economics speakers, and develop their own research questions. During the second semester students conduct original and independent economics research under the guidance of one of the economics faculty members.

**Requirements for a Major in Economics.**

The Economics Major requires a total of eleven courses (including the senior thesis) as follows:

- Econ 104, 105 or 106
- Econ 203 or 204
- Econ 300
- Econ 302
- Econ 304
- Econ 2XX/3XX, 2XX/3XX, 3XX - Three electives, at least one of which must be at the 300-level
- Econ 37X - Junior Research Seminar
- Econ 396A - Fall Semester Senior Research Seminar
- Econ 396B - Spring Semester Senior Thesis

(The economics major also requires completion of Math 118, or the equivalent of two semesters of college level calculus.)

While there is flexibility in the timing and sequence of courses taken for the economics major, students wishing to major in economics are encouraged to have taken Economics 104 or 105 or 106, 203 or 204, and either 300 or 302 by the end of their sophomore year. The junior research seminar is taken during junior year so the appropriate prerequisites need to be taken beforehand. Students planning to go abroad for all or part of junior year will need to consult with the department chair on how to fulfill all the requirements and on whether credit will be given to any courses taken in programs abroad. These students may take the junior seminar during the fall of the senior year. All students must complete Econ 104 or 105, 203 or 204, 300, and 302 by the end of junior year. All students must complete Econ 304 and a Junior Research Seminar by the end of fall semester senior year.

**Requirements for a Minor in Economics.**

The Economics Minor requires a total of six courses, as follows:

- Econ 104, 105 or 106
- Econ 203 or 204
- Econ 300 or 302
- Econ 2XX/3XX, 2XX/3XX, 2XX/3XX - Three electives

**Courses for Students with Special Interests**

*For students interested in applications of economics to public policy.* Most economics courses have some public policy content, but students wishing to emphasize public policy in their studies might particularly want to consider the following:

- Econ 206: Microfinance
- Econ 209: Law and Economics
- Econ 224: Women in the Labor Market
Microeconomic and macroeconomic theory (Econ 104 or 105 or 106, 300 and 302) and statistics and econometrics (Econ 203/204 and 304) are also very useful in policy analysis.

Students seeking further guidance related to public policy may consult with Professor Anne Preston in the Economics Department and Special Student Advisor for Public Policy.

For students interested in economics and mathematics. Mathematical techniques underlie many areas of economics, and economics is one of the fields to which mathematics has been most fruitfully applied. Economics students who want to pursue a structured program in mathematics can complete either an Area of Concentration in Mathematical Economics, which is described in a separate section, or a minor in mathematics in conjunction with economics.

For students interested in business and finance. For students interested in an academic foundation for entrance into the business world and/or graduate schools of business, the Department suggests the following cluster of six economic courses:

- Economics 104 Intensive Intro to Economics; or 105 Intro to Economics; or 106 Intro to Economics with Calculus
- Economics 203: Statistical Methods in Economics (or Economics 204 or Math 203)

One Course from:
- Economics 300: Intermediate Microeconomic Analysis or
- Economics 302: Intermediate Macroeconomic Analysis

Three courses from
- Economics 205: Corporate Finance
- Economics 206: Microfinance
- Economics 207: Money and Banking
- Economics 213: Taming the Modern Corporation
- Economics 255: Crises
- Economics 304: Introduction to Econometrics
- Economics 307: Money and Banking
- Economics 344: Industrial Organization
- Economics 345: Advanced Topics in Finance

Students who are considering this cluster should consult with the economics departmental chair as course offerings change often.

AP Credit, IB Courses, etc. and Advanced Standing in Economics

Students who have had one or more high school courses in economics, taken the AP exam, or completed an International Baccalaureate program in economics sometimes ask whether they can place out of the introductory level economics course at Haverford. In most cases, economics courses taken before college are taught at a lower level than the introductory economics course at Haverford, and students therefore are not permitted to place out of any HC econ course. However, students who believe they might have a strong enough background to place out of the introductory course can take a placement exam before the fall semester begins.

Economics Faculty Members and Their Specialties
RICHARD J. BALL, Professor: Major teaching/research interests: game theory, development and agricultural economics, political economy.

JULIE BECHER, Visiting Assistant Professor: Major teaching/research interests: Health Economics


NEAL GRABELL, Visiting Professor of Economics and Independent College Programs. Major teaching/research interests: Accounting

SALEHA JILANI, Assistant Professor: Major teaching/research interests: global economy; trade; applied microeconomics.

VLADIMIR KONTOROVICH, Professor: Major teaching/research interests: Soviet economics; eastern European modernization, law and economics; microeconomics analysis.

TIMOTHY LAMBIÉ-HANSON, Visiting Assistant Professor: Major teaching/research interests: applied microeconomics, industrial organization, political economics.

SHANNON MUDD, Visiting Assistant Professor: Major teaching/research interests: international economics, financial economics, emerging markets, and principles. Research interests include banking and access to finance.

MARIA OLIVERO, (Spring 2019 Only) Visiting Associate Professor: Major teaching/research interests: Macroeconomics, Fiscal Policy and International Money and Finance.

DAVID OWENS, Associate Professor and Department Chair: Major teaching/research interests: behavioral economics; experimental methods; industrial organization; game theory; applied microeconomics.

GIRI PARAMESWARAN, Assistant Professor: Major teaching/research interests: Political Economy, Applied Microeconomics, Public Finance, Law and Economics, Judicial Politics.

ANNE E. PRESTON, Professor: Major teaching/research interests: labor economics including women in the labor market; contemporary policy issues; econometrics; macroeconomics analysis; experimental analysis of altruism.