ECONOMICS AT THE UNIVERSITY OF WESTERN ONTARIO

A unique opportunity to enter a field you never considered before!!

http://economics.uwo.ca/graduate/

What is the program?

- Immediate admission to M.A. and Ph.D. economics program for students with strong quantitative backgrounds but no previous coursework in economics.
- Obtain M.A. after first 8 months and have the option of continuing with Ph.D.
- Primary background of current first year students: 1 math; 1 statistics; 1 engineering; 13 economics.

Why economics?

- Economists employ various methods to study a wide range of topics.
- These topics include, but are not limited to, education, crime, labour markets, the environment, finance, health, terrorism, international development and international trade.
- Apply your quantitative skills to all sorts of interesting problems.

Why math students?

- The common thread in these problems is a strong reliance on problem solving and math; first year courses use Calculus, Linear Algebra, Real Analysis, Topology, Optimization Theory, and Measure Theory.

Why might you be interested in economics?

- Economics is concerned with understanding reality through the use of rigorous mathematical models.
- Contrary to popular belief, economics is not just the study of money and interest rates. Economics is the study of human choice; different than all other social sciences in its level of mathematical rigour.
- Strong academic environment as in Mathematics, but also employability in the public & private sectors.
- Tenure-track professor positions are common directly out of the Ph.D. **without any post-doctoral terms.**
- NSERC, SSHRC (social sciences equivalent of NSERC), and other scholarships available.

Economics Courses

- The first 8 months is a course-based M.A.. Courses are taken in:
  - Microeconomics – Economics at the level of the individual agent
  - Macroeconomics – Aggregated behaviour over many agents.
  - Econometrics – Probability and statistics applied to economics.
  - Math – General treatment of static and dynamic optimization theory, math for other courses.

The Economics Graduate Degree

- A three-week refresher course is held before classes begin. This ungraded course brings the non-economics undergraduates up to date in economics, and economics undergraduates up to date in mathematics.
- After the M.A., entrance exams are written in the summer for students deciding to continue to the Ph.D.
- The Ph.D. is completed over an additional 3-4 years (the M.A. year counts as the first Ph.D. year). The Ph.D. is a combination of coursework and a thesis.

Why Choose Western?

- Unique program which recruits a mix of non-traditional (physics, mathematics, engineering) and traditional (economics) graduates. **No previous courses in economics are required**.
- Recent rankings place the Department No. 1 in Canada for research and No. 1 in Canada for graduate placement.
- You do not need to commit to a Ph.D. Come and try the first 8 months. If you decide to leave after that, you can leave with an M.A. in economics and get a job, or return to grad school in a different area. If you like it, write the entrance exams and stay for the Ph.D.! In the last two years, 70% of the students decided to continue at Western for the Ph.D, including the non-traditional students.
- Traditional and non-traditional students are treated identically and take the same classes.
- In past years students from physics, math, and engineering backgrounds have performed extremely well, typically in the top tier of their class.
- Small class size: 15-20 people in the first year.
- Only program in Canada which has refresher courses in microeconomics, macroeconomics, econometrics and math to bring students up to date before classes begin. During the orientation there are also Departmental events including weekly visits to the Grad Pub and a first-year book discussion.
- Strong funding: **Expect to offer talented students $13,500 to $15,000 in fellowships and assistantships, PLUS tuition and fees**. Additional external scholarships (NSERC, SSHRC) are rewarded very aggressively **on top of** those figures.

What Can You Do With an Economics Degree?

- In your final year, the faculty will assist you with job market placement.
- **Work in academics (Economics and Business Schools), public (OECD, IMF, Bank of Canada, Federal Reserve Banks), or the private sector**.
- Wide range of good jobs available for people with economics training.
- Western is focused on producing strong candidates for academic positions. Western grads usually move directly into tenure-track professorships out of the Ph.D. without any post-doc terms.
- Assistant professor starting salary at top research institutions is $100,000.
- All 2006-2016 Western grads received immediate job placements:

University of Pennsylvania
Indiana University at Bloomington
Vanderbilt University
Kansas State University
Central Michigan University
Florida State University
Georgia State University

University of Prince Edward Island
Ryerson University
Lakehead University
Wilfrid Laurier University
UWO - BMOS
Atlantic Baptist University, Moncton, NB
Dalhousie University

University of Toronto
HEC Montreal (U. Montreal Business School)
Simon Fraser University
University of Winnipeg
Carleton University
University of Guelph

Zhejang University
Hong Kong University of Sci & Tech
University of Waikato, New Zealand
University of Victoria, Wellington, NZ
Shanghai University of Fin. & Ec.
National University of Singapore Risk Management Institute

Bank of Canada
Bank of Japan
Statistics Canada, Ottawa
LECG, Toronto
Gifford Fong Associates, Lafayette, CA
Department of Finance, Ottawa
Industry Canada

SRDC
Moody's

Testimonials from Students with Non-Economic Backgrounds:

It's a shame that economics is such a well-kept secret to those of us from the natural sciences. We tend to have some vague notions that economics is about money, business, and interest rates. That's about as accurate as saying physics (my undergraduate degree) is about classical dynamical motion in one-dimension; it only captures a very small, stereotypical part of the science. And it is a science. Indeed, economics is a wonderful social science dedicated to understanding human choice, just as physics is dedicated to understanding the universe. Economics uses rigorous mathematical models of economic systems to probe for answers to various questions. I was surprised to find great use for the mathematics I studied in undergrad; calculus, linear algebra, topology, optimization theory, and measure theory, to name a few. I was also pleased to find beauty and symmetry in the economics theorems and models, so much so that I am often reminded of elegant physical theories.

As in physics, there are economic theorists and experimentalists. The theorists are similar to theoretical physicists and the experimentalists work with the data; compiling it, studying it, building models for it and drawing conclusions. I often find it funny that the same tendencies that seem to distinguish theoretical physicists from experimentalists are also present here. The difference is that it is much easier for economists in different fields to communicate with each other, as compared to physicists. The lines between theory and experiment and between different specializations in economics are more blurred than they are in the hard natural sciences.

I love studying economics. And I say this as a student who loves physics and mathematics. For me personally, studying economics is even more exciting, because the concepts I'm dealing with are a part of the everyday world we live in. I'm really happy I decided to give this program a try, and I'm even more pleased that I chose to come to Western. If you get a chance to visit the department, you'll know what I'm talking about. The professors are great teachers, great researchers, and great people to be around. There is a real sense of shared community between the professors, support staff, and graduate students. I look forward to the departmental happy hour every week, to talk about interesting economics and to kick back and hang out with my profs and friends.

Believe me, at one time, I never would have thought that I'd end up wanting to become an economist. Even if you've never considered economics before, you owe it to yourself to find out more.

Lee Ferchoff - B.Sc. Joint Honours, Physics/Mathematics, University of Manitoba.

I've been in the economics program here for over a year now, and although I came into it rather tentatively, it didn't take long for me feel at home. My paramount concerns that I be around people who are friendly and enthusiastic, while doing something that I genuinely enjoy and can excel at - were readily taken care of.

I was initially very surprised (and pleased) at how math-intensive the courses were. The transition to economics from a background exclusively in math was seamless; and because of the diverse specialties of students in our class, there was always someone willing to help you in any area you might be having trouble with. Entering the program, I had expected to find myself at a relative disadvantage because of my lack of experience in economics, but it was a delight to find that I was helping other people with the mathematical aspects of the coursework as often as I was seeking help with the economic side of it. The skills of those with economics training complemented perfectly with those who had taken primarily mathematics, and it created a really great environment to learn in.

Apart from the coursework, what I really enjoyed about my first year was discovering all of the different fields in economics, and what sort of things can be done. I had previously dismissed economics as having some vague connection with business and commerce, topics in which I have scarcely any interest; I had no idea how broadly it is applied. Environmental issues, politics, health, education BB I've developed the impression that most subjects which are studied in their own right have their place somewhere in economics.

While I was quite pleased with both the nature of the coursework and of economics in general, what made my first year here truly exceptional were the people. Our class quickly became good friends, and there was always a general, pervasive feeling of friendliness and cooperation. As for the faculty, from the very start they were welcoming and engaging, always willing to talk about anything, topics in economics or otherwise. It continues to be a joy to come to the department every day, and I routinely look forward to our weekly excursions to the grad club.

Given that my decision to enter this program was a bit unplanned and arbitrary, I'm continually reminded of how fortunate I am to have found a subject that I'm excited about and a fantastic group of people to work with. I've had a wonderful first year here, and I certainly recommend the program here to others who have a background in math or the physical sciences.

Andrea Sweny, B.Sc. Mathematics, Queens University.

Economics is not what you think! When I first heard about this program I actually did not expect I would be interested in economics at all. I was under the misconception that economics was all about finance and business, which are both rather unappealing to me.

Happily, there are plenty of other topics within the scope of economics. Actually, economics is essentially about choices and behaviours, and uses mathematics as a tool to describe and better understand the systems and situations we observe in the world around us.

Initially, I was concerned about my complete lack of previous experience in economics. I was however surprised to discover the great extent of mathematics used, and I am finding my background in pure and applied mathematics to be extremely helpful. In addition, this program has been well-designed to smooth the transition for students of varying backgrounds.

I have also been impressed with the atmosphere in department of economics here at Western. The learning environment here is excellent inside and outside of the classroom. The professors really care, the students are enthusiastic, and everyone benefits from high levels of interaction.

It is a very challenging and rigorous program, but I have found it to be a highly rewarding experience. I am very glad I decided to give economics a try. I would definitely encourage you to look into this unique program.

Deanna Walker, B.Sc. Applied Mathematics, The Univ. of Western Ontario, dwalker4@uwo.ca

Sample Faculty Studying a Wide Variety of Topics in Economics

Lance Lochner's research focuses on human capital and skill development over the lifecycle and on criminal behavior. He is currently interested in issues related to borrowing opportunities and access to higher education. In related research, Lance analyzes the role of family income and borrowing opportunities in affecting earlier family investments in young children and the academic achievement of children at earlier ages. Other recent research, he has explored the relationship between education and crime and whether criminals update their beliefs about the probability they will be arrested if they engage in different types of crime as well as the extent to which those beliefs directly affect criminal behavior. His research has been published in such journals as the American Economic Review, International Economic Review, and the Review of Economic Dynamics.

Igor Livshits' research interests include consumer credit and consumer bankruptcy; foreign debt and sovereign default; political economy; sources of cross-country income differences; investment in human capital and productivity. His recent work includes constructing quantitative models of consumer bankruptcy for the purpose of policy analysis, accounting for the rise in consumer bankruptcies, study of prudential regulation in the presence of sovereign default risk, and studying the sources and implications of cross-country differences in labour market institutions. Igor is a Scholar in the Institutions, Organizations and Growth program of the Canadian Institute for Advanced Research. Igor's research has been supported by SSHRC and Arts, Humanities and Social Sciences Fund, and has been published in the American Economic Review, the Journal of Monetary Economics, and the Economics Letters.

John Whalley works in numerical simulation applied to a number of policy areas. His main focus is on global issues, with a current focus on post Kyoto global environmental negotiations and the global adjustments implied by continued growth in India and China. He is best known for his work on general equilibrium computation and has published nearly 400 papers(around 100 in named refereed journals) and written or edited nearly 40 books. He is a fellow of the Econometric Society and a Fellow of the Royal Society of Canada. He is also a foreign fellow of the Russian Academy of Natural Sciences. He is a research associate of the National Bureau of Economic Research and also directs the global economy research area for CESifo(Germany).

Al Slivinski 's research is on a variety of issues in Public Economics and Political Economy. Much of it develops theoretical models of altruistic behavior in a variety of contexts, including individual donations to charity, voting for political candidates, and founding and managing nonprofit organizations. A recent project, aimed in a different direction, attempts to understand how the potential entry of new firms into an industry effects mergers among existing firms in that market. Slivinski's work has been published in such outlets as The Journal of Public Economics, the Journal of Economic Behavior and Organization, and the Quarterly Journal of Economics.

Books to Read

General Interest:

Diane Coyle. *The Soulful Science: What Economists Really Do and Why it Matters. Princeton: Princeton University Press, 2007.*

William Easterly. *The Elusive Quest for Growth: Economists' Adventures and Misadventures in the Tropics.* Cambridge: The MIT Press, 2002.

Steven E. Landsburg. *The Armchair Economist: Economics & Everyday Life.* New York: The Free Press, 1993

Sample Economics Textbooks:

Undergraduate Micro:	David Besanko and Ronald R. Braeutigam, *Microeconomics*, 2/e. Hoboken, NJ: John Wiley & Sons Inc., 2005
Undergraduate Macro:	Stephen D. Williamson, *Macroeconomics*, 2nd ed. Canadian Edition. Toronto: Pearson Addison Wesley, 2007.
Graduate Micro:	A. Mas-Colell, M.D. Whinston and J.R. Green, *Microeconomic Theory*, Oxford University Press, 1995.
Graduate Macro:	Nancy Stokey and Robert Lucas Jr. (With Edward C. Prescott), *Recursive Methods in Economic Dyanmics*, 1989.

Contact Information:

We are currently accepting students for the Fall 2017 term. If you have any interest in this program, please contact us immediately. We are very happy to help you determine whether our program might be a good match for you.

Graduate Director/Professor: Tim Conley, tconley3@uwo.ca
Graduate Program Coordinator: Sandra Augustine, saugust2@uwo.ca