

AMERICAN UNIVERSITY
FACULTY ANNUAL REPORT
CY 2004

Name:

Alan G. Isaac

Rank:

Associate Professor

Department:

Economics

RESEARCH AND PUBLICATIONS

A. RESEARCH APPEARING IN PRINT

Citation	Co-authors	Key
"PostScript Drawings on Occasion: A Guide for Economists", <i>Social Science Computer Review</i> 22(4), Winter 2004, pp.512-30.		RAJ
"On Intellectual Property Rights: Patents vs. Free and Open Development" chapter 18 of the Elgar Companion to the Economics of Property Rights, 2004, pp. 693--747 (editor: Enrico Colombatto).	Walter G. Park	Chap

B. RESEARCH ACCEPTED FOR PUBLICATION IN FINAL FORM

Citation	Co-authors	Key
"Free and Open Source Software"		Chap

C. MANUSCRIPTS UNDER CONSIDERATION

"Varieties of Fiscal Stimulus: A Conflicting Claims Analysis" (under consideration for a conference volume)

D. CONFERENCE PARTICIPATION

"Varieties of Fiscal Stimulus," presented at the Eastern Economic Association meetings in Washington, DC. 20 February 2004.

E. EXTERNAL INVITED LECTURES

F. EXTERNALLY SPONSORED RESEARCH

G. RESEARCH IN PROGRESS

"Free and Open Software: A Public Policy Approach"

"The Structure of Neoclassical Consumer Theory," ([Available online](#) as a working paper.)

"Portfolio-Balance Effects and the Swiss Exchange Rate: New Evidence," with Rajashree Paralkar. Available as a working paper.

COMMENT ON RESEARCH:

I was equal co-author of the forthcoming paper with Park, which is 50 pages in length.

TEACHING, COURSE DESIGN, AND ADVISING

A. COURSES TAUGHT: 2004

Semester	Course Number	Title	Enrollment	Credit hours
Spring	672	International Economics: Finance	11	3
	782	Seminar in Empirical Macroeconomics	9	3
Subtotal			20	6
Fall	705	Mathematical Economics	13	3
	372	International Economics: Finance	7	3
	712	Macroeconomic Analysis II	5	3
Subtotal			25	9
Summer	301/501	Intermediate Macroeconomics/Macroeconomics	7	3
Subtotal			7	3
TOTAL			52	18

COMMENTS ON TEACHING:

Overall, my course evaluations continue to show my commitment to teaching excellence. The following chart summarizes the overall ratings for the course (question #14) and for the instructor (question #21); the percentage of *responses* better than satisfactory is reported (i.e., Good, Very Good, or Superior) along with the modal response.

Econ 705 is a very innovative course: I include concrete applications of the mathematical material through GAUSS programming assignments and graphics based visualization exercises. This year I introduced the students to the famous `gnuplot` scientific plotting software, which they used as an aid to the visualization of mathematical concepts. The computational innovations were valuable for the students and appreciated by the best of them, although they posed a difficulty for the least capable of them. A general rule was, the better the student the more they appreciated the applications. Note that 90% of the students agreed that the course was demanding.

Course:	% Positive for Course	% Positive for Instructor	Modal Response Course/Instructor
Spring 2004:			
Econ 672	100%	100%	VG/SuVG
Econ 782	100%	100%	Su/Su
Fall 2004:			
Econ 372	100%	100%	Su/Su
Econ 705 (required course)	100%	100%	VG/VG
Econ 712 (required course)	100%	100%	Su/Su
Summer 2004:			
Econ 301/501	100%	100%	VG/VG

I also taught our three day math review for incoming Ph.D. students. August 2004.

B. INDEPENDENT STUDIES/INTERNSHIPS SUPERVISED

C. DISSERTATIONS SUPERVISED

Student	Degree	Participation	Progress
Assen Assenov	PhD	Chair	in progress
Sandy Ku (Chunhui Gu)	PhD	Chair	complete, summer 2004
Nagwa Riad	PhD	Chair	in progress (proposal signed summer 2004)
Charles Mouoyebe	PhD	Chair	in progress (proposal approved Summer 2003)

D. STUDENT ADVISING

I am the MA advisor for eight of our MA students.

Student advising is big component of office hours, of course. I also maintain a number of web pages providing student advice. See, for example, my [software for economists page](#), which I created for our students, but which has found favor with economists across the country. In 2004, my page was added as a key reference in the famous [Resources for Economists](#) compendium.

E. NEW COURSE PREPARATION AND CURRICULUM DEVELOPMENT

In Spring 2004, I taught the department's [Seminar in Macroeconometrics](#) for the first time. I did this as a service to the department, since our newly hired macroeconometrician did not arrive until Fall 2004. This course was a tremendous amount of work: I had never taught it, nor have I ever taken a course in applied macroeconometrics, and finally I am not a macroeconometrician but rather a macroeconomist who occasionally uses macroeconometrics. As the teaching evaluations show, however, the work paid off: The students found the course extremely demanding, yet they awarded it very high marks.

F. TECHNOLOGY IN THE CLASSROOM

In 2004 I was nominated by the College of Arts and Sciences for the University Faculty Award for Innovative Use of Technology in Teaching. I am an avid user of technology in the classroom, both as content delivery and as student training. I develop lecture notes in PDF format which I make available online (via Blackboard). I teach with a laptop, using modern software both to present lecture notes and to illustrate concepts graphically. Examples of the software that I use in the classroom include EViews, gretl, Scientific Workplace, Adobe Acrobat, gnuplot, and Dia. I am also unusually active in training my students, both graduate and undergraduate, in the use of modern software tools.

Last Spring I agreed to teach the department's Seminar in Macroeconometrics (Econ 782). In this course I made sure that students learned advanced features of the EViews econometrics software in order to produce an extensive macroeconomic research paper. Additionally, I taught them to use the LaTeX document preparation system for their research papers and econometric projects, a skill which will serve them well throughout their career (and will be extremely helpful in the dissertation process). They also had to present (in groups) an econometric project in class using a laptop to project their "slides", in which they learned to include sophisticated graphics and complex mathematics. This presentation skill will prove valuable throughout their careers.

In the mathematical economics course Econ-705 I created a collection of gnuplot programming exercises to reinforce the math and illustrate its applications. (These exercises can be found in my [online lecture notes](#).) The best students in the course loved this material. I would like to point out that this useful integration of computer applications into a core mathematical economics course not only unique in our department but is not found in any other local economics departments.

I also trained PhD students in the use of Scientific Notebook for the creation of mathematical documents. Students in Econ-705 and Econ-712 were required to submit homeworks in SN format. Students in Econ-782

were taught to use LaTeX for their research papers, which most recognized to be invaluable. Finally, in Econ-782 (the seminar in empirical macro), I taught my students not only about the capabilities of various macroeconometrics software (we have demonstrated EViews, RATS/CATS, GAMS, and Ox) but also about presentation skills and the software that can support these. Specifically I taught them how to easily generate PDF presentation slides containing math and figures using the LaTeX documentation presentation system, which allow the development of PowerPoint-like presentations without the clumsiness of PowerPoint. As part of this, I make sure that they learn a little about a good programming editor. (I introduce them to the powerful Vim editor, but they are free to choose another.)

I also trained MA and PhD students in the use of the EViews econometrics software. Students were required to use this software in a number of econometrics exercises, which deepened their understanding of the empirical work discussed in class. In my undergraduate courses I moved this year from EViews to the freely downloadable `gretl` econometric package. While not as powerful as EViews, `gretl` is more than adequate at the undergraduate level and meets a frequently expressed demand by students to be able to install the software needed for their econometric exercises on their home computers.

SERVICE ACTIVITIES

A. INTERNAL COMMITTEES

UNIVERSITY AND COLLEGE COMMITTEES

Member, Senate Committee on Information Services AY02/03-AY04/05

Member, Ad Hoc Working Group on Dissertations and Theses AY02/03-AY03/04

DEPARTMENT COMMITTEES

Member, Personnel Committee AY01/02, AY02/03, AY03/04, AY04/05

Member, ad hoc Strategic Planning Committee AY04/05

Member, Rank and Tenure Committee

Member, Naidel Award committee

Member, Tamanga Award committee

B. INITIATIVES WITH STUDENTS OUTSIDE OF THE CLASSROOM

I have worked with students in the Economics and Math departments to remove bugs in the LaTeX thesis class, which I maintain for CAS students writing dissertations using the LaTeX document preparation system. This software is used by quite a few PhD students in Economics and some in Math/Stat.

C. OTHER INTERNAL SERVICE

In 2004 I improved both the appearance and the functionality of the webpage [Software for Economists](#). I also improved several aspects of `authesis.cls`, a LaTeX dissertation formatter for CAS students.

Initiator, graduate student software support.

In 2004 I continued my practice of providing strong software support to our graduate students. Working with the CTE, I coordinated an upgrade of the Scientific Notebook licenses on campus. There is now a 10-simultaneous-user floating license available on EagleNet for the entire AU campus. I also arranged for the user-friendly econometric package `gretl` to be available in the Hurst lab. (This is freely downloadable, open source software, so there was no cost to the university for this.)

Comprehensive Examinations Written and Read: Income Theory, Price Theory, Monetary Economics (3rd reader), International Economics.

D. EXTERNAL SERVICE

Member: Ad hoc advisory group for the `Scientific Workplace` software.

Tester: `gretl` econometric software.

Referee: Journal of Economic Behavior and Organization; Journal of Institutional Economics

Manager, [GAUSS source code archive](#). In 2004, I continued with this entirely volunteer effort, which in 1999 won a **Links2Go Key Resource** award. The archive is in international use, which provides considerable exposure for the department and for the university among econometricians world wide. You cannot understand the level of effort without looking at the [archive](#), but it has been considerable effort.

E. PROFESSIONAL HONORS, AWARDS, COMPETITIONS, OR APPOINTMENTS

F. MEDIA APPEARANCES, INTERVIEWS, PUBLIC TESTIMONY