MISSION OF THE DEPARTMENT OF ECONOMICS

In recognition of the importance of economic literacy, the mission of the University of Hawai‘i at Mānoa Department of Economics is to discover, refine and disseminate economic knowledge, with particular focus on policy issues involving Hawai‘i and the Asia-Pacific region. Faculty members support this mission by performing research; by fostering sound economic reasoning and decision-making through teaching; by contributing to the preparation of students for careers in business, government, and academia; and by providing service to the University and the broader community.

The University of Hawai‘i is an equal opportunity/affirmative action institution and does not discriminate on the basis of race, sex, age, religion, color, national origin, ancestry, handicap, marital status, arrest and court record, sexual orientation, and veteran status. This policy covers admission and access to and participation, treatment, and employment in the University's programs and activities. Sexual harassment is prohibited under this policy.
INTRODUCING THE UNIVERSITY OF HAWAI’I AT MĀNOA

The University of Hawai’i at Mānoa (UHM) is the major research institution in the ten-campus State of Hawaii system of higher education. Founded in 1907 as a land-grant college specializing in agriculture and the mechanical arts, the campus was moved to a 300-acre site in Honolulu's Mānoa Valley soon afterwards. With the addition of the College of Arts and Sciences, it became the University of Hawai’i in 1920 and has since grown into a nationally and internationally respected institution of higher learning.

UHM enrolls 17,000 students, one-fourth at the graduate level, and offers course work leading to bachelor's degrees in 88 fields of study, master's degrees in 87, and doctorates in 53. It also grants degrees in law and medicine and administers certificate programs. Most of these educational opportunities reflect and emphasize the unique geographical, physical, and socio-cultural setting of Hawai’i, as well as the countries and peoples of Asia, the Pacific Rim, and the islands of the Pacific.

THE DEPARTMENT OF ECONOMICS

The Department of Economics is one of 14 academic units in the College of Social Sciences, which in turn is one of four Colleges of Arts and Sciences. The department is housed on the fifth floor of Saunders Hall, a building shared by a number of social science departments and programs. As of June 2004, the department enrolls some 152 undergraduate majors and 63 graduate students. Since introducing a graduate program in the 1960s, the department has awarded over 180 doctoral and 300 master's degrees. Ph.D. and M.A. alumni of the department have successful careers as faculty members at major universities, entrepreneurs, and government policy experts in a variety of settings and institutions, especially in Asia and the Pacific. Faculty research interests make possible graduate field specializations with regional emphasis in the Asia-Pacific region. Resident faculty and visitors regularly present research seminars and have established fruitful associations with prominent economic research institutions in the United States, Asia, and the Pacific, including the Asian Development Bank, the Association of Southeast Asian Nations, the World Bank, and various universities throughout the world.
THE EAST-WEST CENTER

The East-West Center is an internationally recognized education and research organization established by the U.S. Congress in 1960 to strengthen understanding and relations between the United States and the countries of the Asia-Pacific region. The Center helps promote the establishment of a stable, peaceful and prosperous Asia-Pacific community in which the United States is a natural, valued and leading partner.

The Center carries out its mission through programs of cooperative study, training and research. Professionals and students from the United States, Asia and the Pacific study and work together at the East-West Center to better understand issues of common and critical concern and explore mutually beneficial ways of addressing them.

As a national and regional resource, the Center offers: (1) An interdisciplinary research program that examines issues of critical importance in U.S.-Asia-Pacific relations; (2) dialogue and professional enrichment programs that focus on groups central to the communication of ideas: the media, political and policy leaders, and educators; (3) educational programs to develop the human resources needed by the United States and the Asia-Pacific region in an era of increased interdependence.

Fellowships offered by the East-West Center are a major source of financial support for graduate students in economics. See pp. 20-21 for more information on East-West Center Fellowship application procedures. To find out more about the East-West Center go to: http://www.EastWestCenter.org/
Graduate Studies in Economics

Yonsei University, pay regular tuition at UHM and get a tuition waiver from Yonsei. The students take graduate economics courses offered at Yonsei University in English and earn UHM graduate credit.

THE GRADUATE STUDENT BODY

Graduate students in economics at UHM come from the State of Hawai‘i, the mainland United States, Europe, and from many countries in the Pacific region, including Australia, Bangladesh, Canada, China, Hong Kong, India, Indonesia, Japan, Korea, Mongolia, Laos, Malaysia, Nepal, Pakistan, the Philippines, Singapore, Sri Lanka, Taiwan, Thailand, Vietnam, and Pacific Island countries. Some enter the program as mid-career government professionals carefully selected for their preparation, promise, and motivation; others begin the program directly after completing B.A. or M.A. degrees in economics or allied fields. The geographic and cultural diversity of the department's graduate students is a strong catalyst for ideas and research on the part of both students and faculty. As of June 2003, there are 50 Ph.D. students and 13 M.A. students enrolled. Approximately one-third are women.

Graduate students participate in a wide spectrum of activities throughout the Mānoa campus. Economics graduate students elect their own representative to the campus-wide Graduate Student Organization (GSO). They communicate concerns and suggestions to the Department of Economics through the graduate chair who is also chair of the Department’s Graduate Policy Committee. Graduate students in economics elect a representative who sits with faculty on this Committee. They also serve on several other department committees on a voluntary basis.

WHERE OUR GRADUATES ARE EMPLOYED

UHM Economics has an outstanding record of placing its graduates in excellent jobs. Ph.D. graduates have successful careers in academia (48 percent), government (26 percent), and the private sector (26 percent). Our recent graduates include professors of economics at many U.S. and Asian universities, including Kyoto University and Kobe University (Japan), University of Wisconsin (U.S.A.), Singapore National University, University of the Philippines, and Thammasat University and Chulalongkorn University (Thailand). Within the international community, recent graduates serve as economists at the International
Monetary Fund, World Bank, Asian Development Bank, Rockefeller Foundation, and the National Academy of Sciences. Economics department alumni include national legislators in Thailand, the Philippines, Taiwan and Korea. Several graduates hold prominent positions in the Ministry of Finance and the Ministry of International Trade and Industry in Korea. Within Hawai’i, our graduates hold positions at the Hawai’i State Department of Business, Economic Development and Tourism, Verizon Hawai’i, HMSA (Hawaii Medical Service Association), and the University of Hawai’i. Most graduates with Master’s degrees have taken positions with local, state, federal or foreign governments or in the private sector.

**THE GRADUATE PROGRAM IN ECONOMICS**

The present requirements for the M.A. and Ph.D. in economics at the University of Hawai’i have been adopted by members of the Department of Economics faculty and approved by the University. Generally, rules in effect at the time of a student's entry into the program continue to apply to that student until he or she receives the desired degree. There are exceptions, however, and the graduate chair should be consulted on a timely basis as questions arise. More complete information concerning university-wide requirements applicable to graduate students, including minimum grade point levels, the maximum duration of graduate status, and requirements for graduate degrees appear in the current *General and Graduate Information Catalog*, available for a fee through the University of Hawai’i Bookstore or on the web at: [http://www.catalog.hawaii.edu/](http://www.catalog.hawaii.edu/).

UHM Economics passed major changes to its graduate program requirements in Spring 2003. The changes, with a few exceptions, apply only to new students entering the M.A. or Ph.D. programs during or after the Fall 2003 semester. Some changes apply to all students. (1) The Department has changed the time schedule for its microeconomics and macroeconomics qualifying examinations. Both qualifying examinations will be offered only in May and August. (2) Field examinations will no longer be offered, and doctoral students must substitute the new research paper requirement for the field examination.
MASTER’S PROGRAM IN ECONOMICS

The M.A. program in economics is oriented to current and prospective public sector professionals from the U.S. and abroad who seek analytical skills in theoretical and quantitative methods and in-depth knowledge of the institutional characteristics of Asian economies, East-West economic relationships, and important public policy issues. Students in the program can draw on faculty expertise in international economics, population economics, labor economics, economic history, health economics, experimental economics, microeconomics, econometrics, macroeconomics, economic development, public economics and environmental/resource economics. They may also take advantage of the University's excellent offerings in Asian studies, languages, urban planning, international business, and other areas of study. Students who satisfy all prerequisites and who can follow a prescribed schedule can finish the program in 18-24 months. Part-time students require a substantially longer period, since most core courses are offered only once each year on a schedule noted below.

Students must accumulate 30 credit hours in economics, including at least 21 hours of 600- or 700-level courses. Up to 9 credit hours of 400-level courses may apply to the 30 credit hour requirement. Courses numbered 300-level and below cannot be applied to the M.A. degree credit requirements. University-wide regulations require a student to have a B average (3.0 GPA) for all courses completed at UH applied toward the degree, and a B average for all 600-level and 700-level courses. The M.A. in economics requires (a) a four-course common core with a B average; (b) a two-course area of concentration; and (c) an individual research project, constituting the capstone experience for the degree. All first-year masters students must consult with the graduate chair prior to or during the first week of classes in their first and second semesters concerning whether they should take the additional core courses required for those on doctoral program or whether they should take other courses more appropriate to a terminal masters degree.

A. Cram Course in Mathematics for Economics. Offered in late July and early August, this review course is optional for Ph.D. or M.A. students; attendance is highly encouraged! The course provides a partial review of the mathematics that students encounter in ECON 606 and 607 during August and September of their first semester. No credit is given for this course. There is no fee for UHM Economics students to enroll. Graduate students from other departments may
Graduate Studies in Economics

attend on a space-available basis if they pay a fee. Contact the department secretary for details.

B. Core Courses. Completion of the core ensures that students have mastered the skills required to analyze economic issues in their field of concentration and to conduct their individual research project. The core courses are:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
<th>Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Econ 606</td>
<td>Microeconomic Theory I</td>
<td>Fall semester</td>
</tr>
<tr>
<td>Econ 607</td>
<td>Macroeconomic Theory I</td>
<td>Fall semester</td>
</tr>
<tr>
<td>Econ 627</td>
<td>Mathematical Economics</td>
<td>Fall semester</td>
</tr>
<tr>
<td>Econ 628</td>
<td>Quantitative Methods</td>
<td>Spring semester</td>
</tr>
</tbody>
</table>

These courses will be offered only in the semester indicated. Students must complete Econ 321 or its equivalent and a one-semester course in differential calculus (Math 241) prior to taking Econ 627 and 628. Two semesters of calculus are highly recommended. Students must also complete Econ 300 and Econ 301 or their equivalent prior to taking Econ 606 and 607 in the fall semester. Many M.A. students will have completed these requirements while earning a B.A. in economics.

C. Area of Concentration Requirement. Each student will construct an area of concentration, consisting of at least two 600-level courses, subject to the approval of the graduate chair. A brief area of concentration proposal must be submitted to the advisor prior to taking the courses. These courses must be in economics, and they may not include the M.A. or Ph.D. core courses (Econ 606, 607, 608, 609, 627, 628 or 629). For example, one might pursue an interest in trade and development policy with an area of concentration consisting of Econ 663 and Econ 610 or in resource economics with Econ 637 and Econ 638.

D. Individual Project. As a capstone experience for the degree, the individual project is particularly important, allowing students to pursue an idea or problem in which they have a particular interest; to develop and apply critical thinking skills; to use a variety of economics tools and models; and to improve communication skills.
Students will select a faculty advisor and register for the individual project under Econ 732. The individual project is evaluated and a letter grade assigned on the basis of a written report and an oral presentation to invited faculty and students. Students who have completed the 7-course Ph.D. core may substitute a passing grade from either the microeconomics or macroeconomics qualifying exams for the individual project.

E. Optional Thesis. Students may choose to write a master’s thesis, a more formal endeavor than the individual project. An M.A. student choosing this option must complete 6 or 9 credit hours of thesis work and is exempted from the individual project. An M.A. thesis requires the formation of a three-member Committee, approval by the Committee and the Graduate Division, and deposit of the thesis with the Graduate Division. Students interested in this option should consult Graduate Division rules pertaining to Masters Degree Plan A as set out in the UHM catalog and in Graduate Division publications. An on-line version of the UHM catalog can be found at http://www.catalog.hawaii.edu/.

F. Illustrative Schedule. The M.A. program is designed for a student to graduate in three to four semesters by scheduling courses as follows:

<table>
<thead>
<tr>
<th>Semester</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 1st year</td>
<td>606, 607, 627</td>
</tr>
<tr>
<td>Spring 1st year</td>
<td>628, one 400-level and one 600-level elective course</td>
</tr>
<tr>
<td>Fall 2nd year</td>
<td>Two 600-level and one 400-level elective course</td>
</tr>
<tr>
<td>Spring 2nd year</td>
<td>732</td>
</tr>
</tbody>
</table>

A more rapid schedule can be accomplished by registering for 400-level courses during the summer session or completing the capstone project during the summer session between the first and second years. Part-time schedules can be worked out to suit individual students.

Student who may wish to apply to the Ph.D. program following completion of their M.A. must take 608 & 609 in their second semester and sit for Ph.D. qualifying exam in May after their second semester. If admitted to the Ph.D. program, the transition is seamless and the M.A. graduate continues as a doctoral student in the following semester. All 600-level economics courses taken to fulfill M.A. requirements transfer to the Ph.D. program. As a result, a student making satisfactory progress should be able to complete the Ph.D. requirements with an additional 3 years of study. If the M.A. program described above is
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followed, a student may be able to earn both M.A. and Ph.D. degrees within five years.

**MASTER’S DEGREE ON THE DOCTORAL TRACK**

An M.A. student whose ultimate objective is a Ph.D. degree may pursue the M.A. degree by following the Ph.D. course of study. The advantage of such a strategy is that both degrees may be earned within a 4-5-year period, as courses earned for the M.A. degree effectively transfer to the Ph.D. program.

The M.A. in economics on the Ph.D. track requires (a) a seven-course Ph.D. core with a B- or better in each course; (b) a two-course area of concentration composed of two 600-level field courses; (c) one additional 600-level field course; and (d) a passing grade on either the microeconomic theory or macroeconomic theory qualifying examinations. Please refer to the description of the doctoral program below for further details.

**MASTER’S DEGREE *EN ROUTE* TO THE DOCTORAL DEGREE**

Highly qualified applicants with excellent preparation in mathematics, statistics, and economics who hold only an undergraduate degree, i.e., four-year bachelor’s degree or equivalent are invited to apply directly to the Ph.D. program. They may pursue the M.A. degree in economics *en route* to the doctoral degree in economics. Both degrees may be earned within a four-year period. They follow the same course of study as M.A. students on the Ph.D. track as described above. However, they are classified as Ph.D. students from their first semester.

Upon the recommendation of the graduate chair, a Ph.D. student who wishes to obtain an M.A. degree may do so when all the requirements for the M.A. degree have been completed. The M.A. degree must be awarded at the time of the completion of the M.A. program of study, not after a period of time has intervened nor retroactively. Candidates file a degree application for the M.A. following the usual procedures and deadlines.

An M.A. degree will not be awarded to a student who already has a similar degree from another institution. The University of Hawai‘i will not duplicate degrees
from UH or other institutions. Ph.D. students who already hold a M.A. degree in economics or an equivalent field may not use the M.A. degree *en route* option.

**DOCTORAL PROGRAM**

The Ph.D. in economics requires successful completion of (a) seven core courses; (b) qualifying examinations in microeconomic theory and macroeconomic theory; (c) seven 600-level and 700-level courses in economics (including Econ 730) beyond the core; (d) two fields; (e) a research paper; (f) an oral comprehensive exam, administered jointly with the defense of the dissertation proposal; (g) a final oral exam, including defense of the final dissertation; and (h) submission of the final dissertation manuscript to Graduate Division.

**A. Core Courses.** Ph.D. students must complete seven core courses with a grade of B- or better in each course. Normal progress requires completion of the core courses in the first three semesters of the student's enrollment. Three or four courses per semester constitute a full load for first- and second-year graduate students (two or three courses per semester for graduate assistants). If students have time for non-core courses during their first three semesters of enrollment, they may wish to undertake work in English as a second language; mathematics (e.g., calculus, differential equations, or linear algebra); statistics and probability theory; or graduate courses from other fields. Core courses are offered according to the following schedule.

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
<th>Academic Year (Semester)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Econ 606</td>
<td>Microeconomic Theory I</td>
<td>First (Fall)</td>
</tr>
<tr>
<td>Econ 607</td>
<td>Macroeconomic Theory I</td>
<td>First (Fall)</td>
</tr>
<tr>
<td>Econ 627</td>
<td>Mathematics for Economics</td>
<td>First (Fall)</td>
</tr>
<tr>
<td>Econ 608</td>
<td>Microeconomic Theory II</td>
<td>First (Spring)</td>
</tr>
<tr>
<td>Econ 609</td>
<td>Macroeconomic Theory II</td>
<td>First (Spring)</td>
</tr>
<tr>
<td>Econ 628</td>
<td>Quantitative Methods</td>
<td>First (Spring)</td>
</tr>
<tr>
<td>Econ 629</td>
<td>Econometrics</td>
<td>Second (Fall)</td>
</tr>
</tbody>
</table>

Econ 606, 607, 627, and 629 are offered only in the fall semester, and Econ 608, 609, and 628 are offered only in the spring semester.
The Ph.D. student core begins in the fall semester, and most Ph.D. students should plan on starting their program with the cram mathematics course in July/August proceeding the fall semester. Students with deficiencies in economics or mathematics should plan to enroll in summer school. Students with an M.A. degree in economics may be eligible for enrollment during the spring semester and should consult with the Graduate Chair.

Ph.D. students who enroll with an M.A. degree in economics will be exempted from taking ECON 606, 607, 608, and 609 if they take and pass the microeconomics and macroeconomics qualifying examinations. Econ 627 and Econ 628 can also be waived by the Graduate Chair if equivalent courses were passed in the student’s M.A. program and the M.A. degree is a recent vintage.

B. Qualifying Examinations in Microeconomic and Macroeconomic Theory. All Ph.D. students and all MA students who would like to apply for admission to the doctoral program must take qualifying examinations in microeconomics and macroeconomics at the end of their first year. Students must complete Econ 606 and 608 with grades of “B-” or better before taking the microeconomics qualifying exam and must complete Econ 607 and 609 with a grade of “B-” or better before taking the macroeconomics qualifying exam. Students receiving a grade lower than a “B-” in any of the microeconomics or macroeconomics core courses must retake and pass the course with a grade of “B-” or better before they are eligible to take the qualifying exam in that field. The deferred examination must be taken at the next scheduled examination date. An eligible student who does not sit for a qualifying exam at the end of the first year must take and pass the exam in August of the same year or the student will not be allowed to proceed in or be admitted to the doctoral program. The two qualifying examinations will usually be scheduled during the second week following the final exam week of the spring semester. Those who receive passing grades on the two theory qualifying examinations will be admitted into or allowed to proceed in the doctoral program. A student who fails a theory qualifying examination must retake it in August of the same year. A student who fails a qualifying examination for the second time will not be admitted to or allowed to proceed in the doctoral program. The possible grades for these examinations are: High Pass, Pass, and Fail. At their discretion, examining faculty members may append a plus (+) or a minus (-) to grades of High Pass and Pass.
C. Courses Beyond the Core. Doctoral students are required to complete seven 600-level and 700-level courses in economics (including Econ 730) beyond the seven-course core. Students can petition the Graduate Chair to count up to two 600-level and 700-level courses at the doctoral level in other departments toward this requirement.

D. Fields. Doctoral students are required to complete two fields, each consisting of two courses, from our five fields of specialization: Human Resources, Development Economics, Public Economics, International Economics, and Environmental and Resource Economics. The courses are as follows:

1. Economic Development 610 and 611
2. International Economics 660, 662, and 664 (2 of 3)
3. Public Economics 650 and 651
4. Resource & Environmental Economics 637 and 638
5. Human Resources 670 and 672

Students may petition to substitute a field in another discipline or another field in economics for the five fields listed above.

Some field courses are offered annually, others less frequently. As early as practicable, students should decide on the field sequences they intend to take and determine the semesters in which they are offered.

E. Research Paper. Before the end of their fourth semester, doctoral students should, in consultation with the Graduate Chair, reach agreement with a UHM Economics faculty member to serve as their academic advisor and research paper advisor. Students will be provided with a written guide providing requirements for the research paper. Doctoral students are required to enroll in Econ 730 in their fifth semester and complete their research paper. A committee consisting of the student’s research advisor and two members of the UHM Economics graduate faculty will read and grade the paper. The Graduate Chair must approve the student’s research paper committee. Doctoral students must receive a grade of “Pass” or “High Pass” on their research paper to continue in the doctoral program. Students who receive a grade of “Fail” on their paper may submit a revised version during the following semester. Students who receive a grade of “Fail” on the revised paper will not be allowed to proceed further in the doctoral program.
F. Oral Comprehensive Examination. Following successful completion of the core courses, six field courses, the two qualifying exams, a research paper, and the dissertation proposal, an oral examination will be administered jointly with the defense of the dissertation proposal. In consultation with the graduate chair, the student selects a chair and dissertation committee members, to whom the proposal draft is circulated. The oral examination can include a broad probing of the student’s general economic knowledge. A student who fails the comprehensive examination may repeat it once. A student who fails the second time is dismissed from the program. Students who pass the oral exam are advanced to the candidacy for the Ph.D.

G. Final Oral Examination. An oral exam covers the candidate’s defense of the final dissertation and related subjects. The exam must be announced on the News@UH website and is open to the public. It is the candidate’s responsibility to contact the Graduate Division to obtain and submit the necessary forms for the News@UH website. Candidates failing the final examination may repeat it once upon petition approved by the graduate faculty concerned and the dean of the Graduate Division. Those failing it twice are dismissed from the program.

H. Dissertation. A dissertation acceptable to the dissertation committee must be submitted to the Graduate Division. UH regulations require that the dissertation be a scholarly presentation of an original contribution to knowledge resulting from independent research. The student must also comply with all university-wide criteria regarding the format and content of the dissertation.

I. Normal Progress Timeline. Normal progress for doctoral students is as follows:

<table>
<thead>
<tr>
<th>Academic Year (semester)</th>
<th>Standards for Normal Progress.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 semesters into Ph.D. Program</td>
<td>Pass Econ 606, 607, 608, 609, 627, and 628 with grade of B- or better. Pass macroeconomics and microeconomics qualifying exams.</td>
</tr>
<tr>
<td>4 semesters into Ph.D. program</td>
<td>Pass 5 of the 7 courses required beyond the core. Pass Econ 629 with grade of “B-” or better.</td>
</tr>
<tr>
<td>5 semesters into Ph.D. program</td>
<td>Enroll in Econ 730.</td>
</tr>
</tbody>
</table>
6 semesters into Ph.D. program
Pass all 7 courses (including Econ 730) required beyond the core.
Complete research paper.

7 semesters into Ph.D. program
Pass proposal defense.

9 semesters into Ph.D. program
Dissertation completed.
Graduation.

Some students transfer from the M.A. program to the Ph.D. program after completion of the M.A. program at the end of their 4th semester. Normal progress for these students is as follows:

**Academic Year (semester)** | **Standards for Normal Progress.**
--- | ---
2 semesters into Ph.D. program (6 total) | Pass all remaining core courses with grade of B- or better.
 | Pass 5 of the 7 courses required beyond the core.
3 semesters into Ph.D. program (7 total) | Pass all 7 courses (including Econ 730) required beyond the core.
 | Complete research paper.
4 semesters into Ph.D. program (8 total) | Pass proposal defense.
6 semesters into Ph.D. program (10 total) | Dissertation completed.
 | Graduation.

Students with scholarship funding (EWC and ADB) are expected to complete their proposal defense by the end of their 6th semester and to complete their dissertation by the end of their 8th semester.

**JOINT ECONOMICS-BUSINESS DOCTORAL PROGRAM**

A joint economics-business program leading to a Ph.D. in economics is available to students who have earned or are completing an M.B.A. degree or equivalent. The program requires that one of the two fields be made up of suitable doctoral-
level courses in the College of Business Administration. See the Graduate Chair for more details.

**ACADEMIC PREPARATION FOR ENTRY**

Prior degrees in economics at the B.A. or M.A. level are **not** required.

There are mathematics requirements. Applicants for admission to the M.A. program must complete a one-semester course in calculus prior to entry in the fall semester. A second course in calculus is highly recommended. Applicants for admission to the Ph.D. program need additional mathematics. We will consider applicants who have completed the equivalent of two three-credit semester courses in calculus prior to entry in the fall semester. However, we strongly recommend the completion of two additional courses prior to entry in any of the following subjects: advanced calculus, linear algebra, differential equations, real analysis or related areas.

There are also economics and statistics requirements. All entrants in the M.A. program must have completed three one-semester courses prior to entry in the fall semester: introductory statistics, intermediate microeconomics, and intermediate macroeconomics.

Some applicants, at the time they submit their application forms, will not have completed the above requirements. They may be working toward their completion prior to entry in the fall semester. Such applicants may be admitted **conditionally.** All conditional requirements must be completed prior to starting the M.A. or Ph.D. programs.

**APPLICATION PROCEDURES**

The application deadlines for non-U.S. citizens are January 15 for the fall semester and August 1 for the spring semester. Non-U.S. citizens who are already residing in the United States must still abide by these deadlines, unless they possess a permanent resident card from the INS. The deadlines for U.S. citizens are March 1 for the fall semester and September 1 for the spring semester.
There is an application fee of $50 for non-U.S. applicants and $25 for U.S. applicants. This fee cannot be waived or deferred. Applicants are strongly urged to apply for admission in the fall semester, given the scheduling of core courses.

Three ways to apply:

a. We e-mail you forms and you mail back completed forms.
b. Apply on-line.
c. Download forms from our website and mail back.

You may apply on-line or download the graduate application and instructions from the Graduate Division web site at:

Web site: http://www.hawaii.edu/graduate/

Those applying for admission as classified graduate students in economics at UHM should submit the following:

To the Graduate Division:

(1) Completed information form.

(2) Two official copies of transcripts directly from the registrar of each institution attended. Transcripts in a language other than English must be accompanied by certified English translations. (The Graduate Division requires two official copies of the original language version and two official English translation copies.)

(3) Official transcripts of the TOEFL (Test of English as a Foreign Language) for all applicants who either (a) do not speak English as a native language or (b) do not have a degree from an accredited institution of higher learning at which English is the primary medium of instruction.

(4) University of Hawai’i Application for Graduate Admission. This can be mailed or submitted on-line.

(5) University of Hawai’i application fee of $50 for foreign applicants or $25 for American applicants. Your fee must be submitted in U.S. dollars, either in the form of a check drawn on a U.S. bank or an international
money order. Checks should be made payable to the University of Hawai‘i. The application fee cannot be waived.

Applications and supporting materials such as official college transcripts, TOEFL, and GRE results should be sent to:

Graduate Admissions
University of Hawai‘i at Mānoa
Spalding Hall 354
2540 Maile Way
Honolulu, HI 96822 USA

To the Department of Economics:

(1) Two Individual Evaluations. These forms may be downloaded from the department’s web site at: http://www.economics.hawaii.edu/programs/grad_program.html Evaluators should mail or e-mail confidential letters of recommendation directly to the Economics Department.

(2) Graduate Assistantship Application and two Graduate Assistantship Evaluation forms, if applying for a teaching assistantship position. These forms may be downloaded from the department’s web site at: http://www.economics.hawaii.edu/programs/grad_program.html

(3) Official Graduate Record Examination (GRE) scores. GRE scores are required by the Economics Department. Applicants should take the general test. The subject test is optional. The general test is comprised of verbal, quantitative and analytical writing sections. Information may be requested by contacting the Educational Testing Service directly at:

http://www.gre.org

Information about test dates, fees, registration procedures, and deadlines is also available from most universities. The GRE should be taken early so
that score transcripts can be submitted directly to the University of Hawai‘i by the relevant application deadline. The GMAT is not substitutable for the GRE.

By departmental rules, GRE scores are absolutely required in application dossiers. Failure to provide GRE scores will result in denial of admission. Historically, scores on the quantitative portion of the GRE have had a high positive correlation with subsequent success in the Ph.D. program. About half of those admitted to the Ph.D. program have had GRE quantitative scores of 700 or above. Quantitative scores are also an important indicator of success in the MA program.

Experience has shown that the expense, timing, and logistical details of taking the GRE can be a hardship for students in certain countries. It is vital that planning for this element of the application dossier be carried out well in advance of all deadlines. Any difficulties that may prevent timely submission of GRE scores should be communicated to the Graduate Chair as early as practicable.

**TUITION, FEES, AND FINANCIAL SUPPORT**

For the 2004-2005 academic year (comprising the fall 2004 and spring 2005 semesters), University of Hawai‘i at Mānoa full-time graduate tuition is $5,424.00 per semester for nonresidents of Hawai‘i; residents pay $2,316.00 per semester. Summer session tuition in 2004 is $186.00 per credit hour for residents and nonresidents taking courses at the 500-level and above. Summer session tuition in 2004 is $138.00 per credit hour for residents and nonresidents taking courses at the 400-level and below. Although non-citizens of the United States generally cannot qualify for resident status, the non-resident portion of tuition may be waived for citizens of the following countries: the People’s Republic of China, Fiji, Indonesia, Japan, Korea, Malaysia, Myanmar, Papua New Guinea, the Philippines, Singapore, Taiwan, Thailand, Vietnam (refugee status) and a Pacific island served by the University of the South Pacific. Thus, applicants from these countries may pay the same tuition as Hawai‘i state residents. The waiver of the non-resident portion of tuition is granted by the Graduate Division in the form of a Pacific Asia Tuition Differential Exemption (APTDE). If the Graduate Division awards an applicant an APTDE, it will be done automatically. Applicants for admission should not apply for it. For the 2004-2005 academic year, students are
charged fees of about $132 for student activities, the Campus Center, and the Graduate Student Organization.

There are several sources of financial assistance available to graduate students in economics at UHM. These include:

A. Graduate assistantships. Each year several graduate assistantships (GAs) are made available to the Department of Economics. Graduate assistants typically assist faculty members who instruct principles and other courses in economics; they read problem sets and meet with students; occasionally they serve as research assistants or in other capacities. A new graduate assistant with an MA degree begins in 2004 at $13,296. Graduate assistants also receive full tuition waivers and health insurance benefits. Since graduate assistants usually engage in verbal instruction, a high premium is placed on their facility in English as well as their knowledge of economics. The University requires that all foreign GA applicants take the TOEFL exam and score 600 or better on the paper version or 250 or better on the computer version.

B. East-West Center Fellowships. The Department of Economics maintains strong links with the East-West Center adjoining the Mānoa campus. EWC currently makes available graduate fellowships to individuals interested in participating in the educational and research programs at the EWC while pursuing a master’s or doctoral degree at the University of Hawai‘i. At present, about one-third of the graduate students in economics at UH Mānoa are also EWC degree fellows. Some Department of Economics faculty members have joint appointments or other affiliations with East-West Center programs, and some EWC senior fellows are affiliate faculty of the Department, thereby facilitating the long-standing cooperation between the EWC and the Department of Economics. EWC fellowships are available to students from the United States and other countries of the Pacific Rim and Asia having formal ties with the East-West Center. Note that EWC applications are due earlier than UH applications. The deadline for EWC applications is currently November 1. Students are encouraged to request application forms between July and September to insure adequate time for completion and submission. Nonetheless, the EWC will send out applications for financial aid up to two weeks before the deadline to applicants in most countries. Those interested in applying can download an application from the following website:
Web site: http://www.eastwestcenter.org/edu-sp.asp

Or you can request via e-mail that an application be e-mailed or mailed to you:

E-mail: EWCUHM@EastWestCenter.org

Or by writing to the following address, an application be mailed to you:

GRADUATE DEGREE FELLOWSHIPS
EWC-UHM Scholarship Office, Burns Hall 2066
East-West Center
1601 East-West Road
Honolulu, Hawaii 96848-1601 USA

C. Tuition Waivers. A modest number of full and partial tuition waivers are available to assist students who are able to defray part but not all of the costs of their graduate education in economics at the University of Hawai‘i. They are awarded on the basis of need and/or merit.

All need-based tuition waivers are available to Hawai‘i residents who are applying for admission or are continuing students. These waivers are awarded by the Financial Aid Office in the Student Services Center, not by the Department of Economics. Interested applicants and students should contact UHM Financial Aid Services at http://www.hawaii.edu/fas/.

Merit-based tuition waivers are also available to applicants for admission and continuing students, regardless of country or state of residence. These waivers are awarded by the Department of Economics. All admitted applicants are automatically considered for tuition waivers. Continuing students should apply for a tuition waiver by March 1 for the following academic year.

D. Hung Family Fellowships. Each year one fellowship in Chinese economic policy is funded by the Hung Family Endowment at a minimum level of $10,000, along with a full tuition waiver provided by the University of Hawai‘i. Residents of China and Taiwan are eligible. The fellowship is awarded on a competitive basis to a doctoral student in the UH Department of Economics who has defended a dissertation proposal on Chinese economic policy. At the discretion of the Department, the one-year award can be renewed for a second
Graduate Studies in Economics

year. The application must include a letter of recommendation from the chair of the dissertation committee and a copy of the dissertation proposal. The deadline for application submission is March 15. Please send application materials by e-mail to the Graduate Chair.

E. Asian Development Bank/Government of Japan Scholarships. The Asian Development Bank, as part of its Scholarship Program funded by the Government of Japan, offers opportunities to talented individuals from its developing member countries to pursue post-graduate studies. Scholarships to study economics are awarded through the East-West Center. The awards cover full tuition and fees, a monthly subsistence allowance, housing in East-West Center dormitories (except for students with accompanying children), medical insurance, and airfare. Students from Japan, Taiwan, Singapore, and Brunei are not eligible. Although these countries are members of the Asian Development Bank, they do not meet the criteria of being developing nations. Questions regarding eligibility should be directed to the scholarship coordinator at the address below. The deadline for ADB/Government of Japan scholarships is November 1 of each year. Please note that this deadline is earlier than the University of Hawai‘i deadline. Those interested in applying can download an application from the following website:

Web site: http://www.eastwestcenter.org/edu-sp.asp

Or you can request via e-mail that an application be e-mailed to you:

E-mail: adbjsp@ewc.hawaii.edu

F. Other Sources. U.S. citizens may obtain A Guide to Financial Aid at the University of Hawai‘i from the Financial Aid Office in the Student Services Center. This pamphlet contains a description of many sources of financial aid available to U.S. citizens. A guide to financial aid can be downloaded from the Financial Aid Office

Web site: http://www.hawaii.edu/fas/

Or you can request a copy of the pamphlet by e-mail:

E-mail: finaid@hawaii.edu
Graduate Studies in Economics

Financial aid information for foreign students is available on the website of the international student services’ office:

Web site: http://www2.hawaii.edu/issmanoa

Non-U.S. citizens may also obtain financial aid information from the International Student Services office by sending an e-mail to the ISS office:

E-mail: issmanoa@hawaii.edu

Information about financial aid sources can also be found on the UHM Economics website:

www.economics.hawaii.edu

Professors with research grants advertise for research assistants on an irregular basis. Advertisements for research assistants, along with advertisements for other on- and off-campus jobs, are usually posted on the student employment’s website at:

Web site: http://sece.hawaii.edu/

More information on employment opportunities can be found on the UHM Economics website:

www.economics.hawaii.edu

Graduate Economics Courses

All courses carry 3 credits except for those designated (V), which carry variable credit at the discretion of the instructor. Courses designated (*) are offered irregularly. Other courses are offered regularly but some less often than once a year. Students should determine as soon as possible during which semesters courses of interest are offered. Courses are described in the University of Hawai‘i general catalog.
<table>
<thead>
<tr>
<th>Number</th>
<th>Course Name</th>
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<tr>
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<td>Microeconomics and Policy Analysis</td>
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<tr>
<td>605</td>
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<td>606</td>
<td>Microeconomic Theory I</td>
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<td>607</td>
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<td>Macroeconomic Theory II</td>
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<td>637</td>
<td>Resource Economics</td>
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<td>Environmental Resource Economics</td>
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<td>650</td>
<td>Theory of Public Finance-Expenditures</td>
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<td>651</td>
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<td>660</td>
<td>International Trade &amp; Welfare</td>
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<td>662</td>
<td>International Monetary Economics</td>
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<td>663*</td>
<td>Trade Policy</td>
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<td>664*</td>
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<td>670</td>
<td>Labor Economics I</td>
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<td>671*</td>
<td>Labor Economics II</td>
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<td>Economics of Population</td>
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<td>680*</td>
<td>Industrial Organization</td>
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<td>686</td>
<td>Strategic Behavior and Experimental Economics</td>
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<td>699V</td>
<td>Directed Research</td>
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<td>700V</td>
<td>Thesis Research</td>
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<tr>
<td>724*</td>
<td>Seminar in Advanced Economics and Quant. Meth.</td>
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<tr>
<td>730</td>
<td>Research Seminar</td>
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<tr>
<td>731</td>
<td>MA Cooperative Research Seminar</td>
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<tr>
<td>732</td>
<td>Individual Research Project</td>
</tr>
<tr>
<td>780*</td>
<td>Seminar: Selected Topics in Economic Analysis</td>
</tr>
</tbody>
</table>
Special Courses. A student must have the individual faculty supervisor’s consent and the graduate chair’s approval prior to registration for Econ 699, 700, 732, or 800. Econ 699, 730, and 800 must be taken on a CR/NC (credit or no credit) basis, although in exceptional cases the graduate chair may approve 699 for a letter grade. Econ 732 must be taken for a letter grade to count toward the MA degree.

Selected Undergraduate Courses are available for new graduate students making up deficiencies and for satisfying certain requirements for the MA degree.

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<th>Number</th>
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<td>301</td>
<td>Intermediate Economics: Price Theory</td>
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<td>321</td>
<td>Introduction to Statistics</td>
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<td>410</td>
<td>Economic Development</td>
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<td>412*</td>
<td>Economic Development of the United States</td>
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<td>415</td>
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<td>416</td>
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<td>Pacific Island Economies</td>
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<td>420*</td>
<td>Mathematical Economics</td>
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<td>424*</td>
<td>Introduction to Theory of Statistics</td>
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<td>427</td>
<td>Economic Forecasting</td>
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<td>430</td>
<td>Economics of Human Resources</td>
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<td>Economics of Population</td>
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<td>Monetary Theory and Policy</td>
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<td>452</td>
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<td>458</td>
<td>Project Evaluation and Resource Management</td>
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<td>460</td>
<td>International Trade and Welfare</td>
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<td>461</td>
<td>International Monetary Economics</td>
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<tr>
<td>466*</td>
<td>Growth and Crisis in World Economy</td>
</tr>
<tr>
<td>470</td>
<td>Industrial Organization</td>
</tr>
</tbody>
</table>
FACULTY RESEARCH INTERESTS AND RECENT PUBLICATIONS

CARL S. BONHAM Ph.D., University of Texas at Austin 1989. Macroeconomics, applied econometrics and forecasting, tourism economics.


Affiliations: University of Hawai’i Economic Research Organization.


Affiliations: University of Hawai’i Economic Research Organization; United Nations Project LINK


DENISE E. KONAN \textit{Ph.D., University of Colorado at Boulder 1993. International trade theory, direct foreign investment, preferential trading agreements, computable general equilibrium analysis.}


SUMNER J. LA CROIX Ph.D., University of Washington 1981. Economic history and development of Asia and the Pacific Islands; industrial organization; law and economics.


Affiliations: Affiliate Faculty, UHM Center for Chinese Studies; East-West Center; University of Canterbury, New Zealand; Australian Graduate School of
Management, Sydney, Australia; Fudan University, Shanghai, China; Barnard College, Columbia University; University of California, Berkeley.

CHUNG H. LEE  Ph.D., University of California at Berkeley 1966. Economic development, international economics.


SANG-HYOP LEE, Ph.D., Michigan State University, 1998. Human resources. labor economics, applied econometrics.

JAMES MAK Ph.D., Purdue University 1970. Economics of travel and tourism, public finance, Japan, Hawai‘i and Pacific Island economies.


Affiliations: Kobe University.

ANDREW MASON Ph.D., University of Michigan 1975. Population economics, macroeconomics, economic growth

Graduate Studies in Economics


Affiliations: East-West Center, Senior Fellow (1992-present) and Director (1992-96); University of California-Berkeley, Visiting Scholar (2003); Institut d’Etudes Politiques de Paris, Visiting Professor (1998); Massachusetts Institute of Technology, Visiting Scholar (1983-84).

JAMES E. T. MONCUR  Ph.D., Washington State University 1971. Water resources economics


Affiliations: Director, University of Hawai’i Water Resources Research Center; Thammasat University (Bangkok); Brigham Young University.


Affiliations: Board of Editors, Asian Journal of Agricultural Economics, Contemporary Economic Policy; Advisor on economic policy and agricultural development in the Philippines; Member, American Environmental Economic Association; International Association of New Institutional Economists, American and Australian Associations of Agricultural Economics.

GERARD RUSSO Ph.D., Northwestern University 1989. Health economics, applied microeconomics, industrial organization.


Affiliations: East-West Center, Research Program, Population and Health Studies.

KATERINA V. SHERSTYUK  Ph.D., California Institute of Technology 1995. Experimental economics, information theory, game theory, mechanism design.


Affiliation: University of Hawai’i

XIAOJUN WANG  Ph.D., The Ohio State University 2001. Macroeconomics, Econometrics, and China Economy.

“Efficiency Wages and Work Incentives in Urban and Rural China” (with B. Fleisher), Journal of Comparative Economics (2001); “Skill Differentials, Return

Affiliations: University of Hawai’i Center for Chinese Studies.

**COOPERATING GRADUATE FACULTY**

**ERIC IKSOON IM** Ph.D., University of Hawai’i at Mānoa, 1982. Econometrics; Mathematical Economics; Labor Economics.


**Institutional Affiliations:**
East-West Center; Korea Labor Institute; Stanford Business School; American Mathematical Association (Reviewer); Yonsei University (External Examiner)


Affiliations: Associate Dean, Graduate Division, University of Hawai‘i

PINGSUN LEUNG  Ph.D; University of Hawai‘i 1977. Production economics, operations research, economics of aquaculture and fisheries.


Affiliations: Molecular Biosciences and Bioengineering, CTAHR; Joint Institute for Marine and Atmospheric Research, SOEST; Honorary Guest Professor, Jilin
University; Co-editor, *Aquaculture Economics and Management* Journal; UN Food and Agriculture Organization.


Affiliations: University of Hawai‘i, College of Business Administration

**AFFILIATE GRADUATE FACULTY**


Affiliations: *Huber Hurst Professor of Business and Legal Studies*; University of Florida.

**LEE-JAY CHO** Ph.D., University of Chicago, 1965. *Demography and economic development.*


Affiliations: Senior Advisor and Chairman, Northeast Asia Economic Forum, East-West Center; founding chairman, Association of National Censuses and Statistics Directors of Asia, America and the Pacific; chairman, Northeast Asia Economic Forum; International Union for the Scientific Study of Population (member); International Statistical Institute (member); American Sociological
LEE H. ENDRESS  Ph.D., University of Hawai‘i at Mānoa, 1994. Environmental and resource economics, growth theory and sustainable development, economics of international security.


Affiliations: Director, College of Securities Studies, Asia-Pacific Center For Security Studies; American Economic Association; Western Economic Association; Mathematical Association of America; Japan-America Society of Hawai‘i.


International Production Networks in Asia. Rivalry or Riches? (2000); Technological Capabilities and Export Success-Lessons from East Asia (1998); Industry and Innovation (edited with Linsu Kim); “Global Production Networks, Knowledge Diffusion and Local Capability Formation” (with Linsu Kim),

Affiliations: Senior Fellow, East-West Center, Research Program, Economic Studies.

FEREIDUN FESHARAKI Ph.D., University of Surrey 1974. Economics of non-renewable energy sources (Mainly Oil and Gas), emphasis on energy policy in the United States, Asia-Pacific, and OPEC countries.


Affiliations: East-West Center, Senior Fellow; FACTS Inc. (Hawai’i, Singapore, Seattle), President and CEO ; Center for Strategic and International Studies (CSIS) Washington D.C. Senior Associate, Council on Foreign Relations, New York, Life member, Member of the Advisory Board: Nippon Oil Company of Japan, Member of the Board: American Iranian Council, Pacific Council on International Policy, Life member, International Association for Energy Economics (international president, 1993), Elected as a Senior Fellow of the U.S. Association for Energy Economics for distinguished service in the field of energy economics.
RANA HASAN Ph.D., University of Maryland, College Park 1997. Economic development, international economics.


MEHEROO JUSSAWALLA Ph.D., Osmania University 1962. Telecommunications and information economics related to trade and development.


Affiliations: Board of Trustees of the Pacific Telecommunications Council (Member); Advisory Board, International Institute of Communications, London (Member).
RODNEY B.W. SMITH  Ph.D., University of Maryland, 1992. Environmental and resource economics, mechanism design theory, economic development, production economics.


Affiliations: Department of Economics, University of Hawai‘i.

ZHONGXIANG ZHANG  Ph.D., University of Wageningen, The Netherlands 1996. Energy and environmental economics; climate economics and policy; trade and the environment; applied economic modelling.


Affiliations: East-West Center; Centre for Environment and Development, Chinese Academy of Social Sciences (Beijing, China); China Centre for Regional Economic Research, Peking University (Beijing, China); Faculty of Economics and Faculty of Law, University of Groningen (Groningen, The Netherlands; 1997-2001); Editorial boards (*Climate Policy*; *Energy Policy*; *Energy and Environment*; *Environmental Management and Policy*; *Environmental Science and Policy*; *International Environmental Agreements*; *International Journal of Energy, Environment and Economics*).