

## Term Information

Effective Term Autumn 2012

## General Information

Course Bulletin Listing/Subject Area Economics  
Fiscal Unit/Academic Org Economics - D0722  
College/Academic Group Arts and Sciences  
Level/Career Graduate  
Course Number/Catalog 8893.03  
Course Title Colloquium in Econometrics  
Transcript Abbreviation Econometrics Collo  
Course Description A supervised workshop in which advanced graduate students report their latest research in progress on the themes chosen by the colloquium instructor in econometrics.  
Semester Credit Hours/Units Variable: Min 1 Max 3

## Offering Information

Length Of Course 14 Week, 7 Week, 4 Week (May Session), 12 Week (May + Summer)  
Flexibly Scheduled Course Never  
Does any section of this course have a distance education component? No  
Grading Basis Letter Grade  
Repeatable Yes  
Allow Multiple Enrollments in Term No  
Max Credit Hours/Units Allowed 16  
Max Completions Allowed 8  
Course Components Workshop  
Grade Roster Component Workshop  
Credit Available by Exam No  
Admission Condition Course No  
Off Campus Never  
Campus of Offering Columbus

## Prerequisites and Exclusions

Prerequisites/Corequisites Permission of instructor and economics director of graduate studies; open to students who have completed PhD field courses approved by economics director of graduate studies; repeatable 7 times to a maximum of 16 credit hours

Exclusions

## Cross-Listings

Cross-Listings

## Subject/CIP Code

Subject/CIP Code 45.0601  
Subsidy Level Doctoral Course  
Intended Rank Doctoral

## Quarters to Semesters

### Quarters to Semesters

New course

Give a rationale statement explaining the purpose of the new course

Group independent study-cum-workshop in which research in progress can be presented, critiqued and discussed in the field of econometrics.

Sought concurrence from the following Fiscal Units or College

## Requirement/Elective Designation

The course is an elective (for this or other units) or is a service course for other units

## Course Details

Course goals or learning objectives/outcomes

Content Topic List

- Original research or innovations in econometrics. Research themes and contents vary according to enrolled students' research need and colloquium instructor's research interest.

## Attachments

- E8893.03 Colloquim\$Econometrics@DGS.pdf: Course Syllabus

*(Syllabus. Owner: Miyazaki,Hajime)*

## Comments

## Workflow Information

| Status           | User(s)   | Date/Time           | Step                   |
|------------------|---|---------------------|------------------------|
| Submitted        | Miyazaki,Hajime   | 04/07/2012 04:33 AM | Submitted for Approval |
| Approved         | Miyazaki,Hajime   | 04/07/2012 04:42 AM | Unit Approval          |
| Approved         | Haddad,Deborah Moore  | 04/07/2012 09:01 AM | College Approval       |
| Pending Approval | Nolen,Dawn<br>Jenkins,Mary Ellen Bigler<br>Meyers,Catherine Anne<br>Vankeerbergen,Bernadette Chantal<br>Hogle,Danielle Nicole<br>Hanlin,Deborah Kay | 04/07/2012 09:01 AM | ASCCAO Approval        |

### **ECONOMICS 8893.03: COLLOQUIUM IN ECONOMETRICS**

**COURSE OBJECTIVE:** A supervised workshop in which advanced graduate students report their latest research on the theme chosen by the instructor in econometrics and related fields. The workshop provides a forum in which research *in progress* can be discussed in depth, to enable hands-on guidance on research directions, presentations and publication quality writing, in the group workshop setting. The colloquium instructor selects a research theme, on which a series of speakers, mostly advanced graduate students and occasionally faculty members, gives presentations on their econometrics research in progress. The colloquium instructor may occasionally provide supplementary lectures to advance the participants' research in progress.

**PREREQUISITES:** Permission of instructor and economics director of graduate studies. Open to students who passed Ph.D. qualifier exams in both micro and macroeconomics and fulfilled two Ph.D. field requirements. Colloquium instructor may impose additional prerequisites. Letter grade only.

**CREDIT HOURS:** This colloquium course is repeatable to a maximum of 16 credit hours and of 8 completions, and may be offered every term. The course credit hours are variable so that a post candidacy graduate student may take it for one credit hour.

Credit Hours: 01 – 03 Variable  
Course Listing: G  
Grade: Letter grade  
Repeatability: Maximum 16 credit hours and Maximum 8 completions

**COURSE REQUIREMENTS:** The course meets twice per week. Students are required to submit a term research paper, present their work at least once, write critiques of each work presented, and participate actively in each class meeting. The exact weights of these requirements will be determined by a colloquium instructor.

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### **Autumn Semester 2012**

#### **Colloquium Theme: Econometric Models with Interactions**

Colloquium Instructor: Professor Lung-fei Lee  
475 Arps Hall, 1945 N. High Street  
Phone: 292-5508 Email: lee.1777  
Office Hours (TBA)

Course Overview: This course covers major research topics in the evolving frontiers of econometrics with interactions, ranging from concepts, methods and models to empirical relevance for various fields of economics.

Prerequisites: a successful completion of micro and macro qualifiers, a successful completion of two Ph.D. field requirements, advanced courses in econometrics, and permission of instructor and economics director of graduate studies.

Course Grading: Students will receive a letter grade based on the following criteria: 30% for participation, 30% for presentation, and 40% for the resulting research paper.

**Academic Misconduct: It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term “academic misconduct” includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-487). For additional information, see the Code of Student Conduct ([http://studentaffairs.osu.edu/info\\_for\\_students/csc.asp](http://studentaffairs.osu.edu/info_for_students/csc.asp)).**

#### **COURSE SCHEDULE OUTLINE:**

- Week 1. Presentation by the instructor on research issues in econometrics of interactions.
- Week 2. Presentation by a student (TBA) on the student’s current research in spatial econometrics. Discussion by the instructor and other participants.
- Week 3. Presentation by a student (TBA) on the student’s current research in social interactions. Discussion by the instructor and other participants.
- Week 4. Presentation by a student (TBA) on the student’s current research in econometrics of networks. Discussion by the instructor and other participants.
- Week 5. Presentation by a student (TBA) on the student’s current research in empirical applications of spatial econometrics. Discussion by the instructor and other participants.
- Week 6. Presentation by a student (TBA) on the student’s current research in empirical applications of social interactions. Discussion by the instructor and other participants.
- Week 7. Presentation by a student (TBA) on the student’s current research in empirical applications of network econometric models. Discussion by the instructor and other participants.
- Week 8. Presentation by a student (TBA) on the student’s current research in nonlinear spatial econometric models. Discussion by the instructor and other participants.
- Week 9. Presentation by a student (TBA) on the student’s current research in an empirical study of nonlinear spatial models. Discussion by the instructor and other participants.
- Week 10. Presentation by a student (TBA) on the student’s current research in Bayesian econometric methods on spatial models. Discussion by the instructor and other participants.
- Week 11. Presentation by a student (TBA) on the student’s current research in econometric models with learning in networks. Discussion by the instructor and other participants.
- Week 12. Presentation by a student (TBA) on the student’s current research in economic models of endogenous network formation. Discussion by the instructor and other participants.
- Week 13. Presentation by a student (TBA) on the student’s current research in network models with selectivity bias. Discussion by the instructor and other participants.
- Week 14. Presentation by a student (TBA) on the student’s current research in asymptotic statistical properties of network models. Discussion by the instructor and other participants.

**GENERAL READING LIST:**

- Chih-Sheng Hsieh and Lung-Fei Lee (2011), 'A Social Interactions Model with Endogenous Friendship Formation and Selectivity.'
- Han, Xiaoyi and Lung-fei Lee (2012), 'Model Selection by J tests for the Spatial Autoregressive Model vs. the Matrix Exponential Spatial Model.'
- Han, Xiaoyi (2012), 'Smoothness Prior for Spatial Externality Models.'
- Jaffe, Adam B., Manuel Trajtenberg, and Rebecca Henderson (1993), 'Geographic Localization of Knowledge Spillovers as Evidenced by Patent Citations,' *Quarterly Journal of Economics*, Vol. 108, No. 3, pp. 577-598.
- Jenish, N., and I.R. Prucha (2009), 'Central Limit Theorems and Uniform Laws of Large Numbers for Arrays of Random Fields.' *Journal of Econometrics* 150, pp. 86-98.
- Jenish, N., and I.R. Prucha (2011), 'On Spatial Processes and Asymptotic Inference under Near-Epoch Dependence.'
- Jin, Fei and Lung-fei Lee (2011), 'Cox-type Tests for Competing Spatial Autoregressive Models with Spatial Autoregressive Disturbances'.
- Lee, Lung-fei, Xiaodong Liu, and Xu Lin (2010), 'Specification and Estimation of Social Interaction Models with Network Structures.' *The Econometrics Journal*, Vol.13, pp. 145-176.
- Lee, Lung-fei and Jihai Yu (2012), 'QML Estimation of Spatial Dynamic Panel Data Models with Time Varying Spatial Weights Matrices.' *Spatial Economic Analysis* 7, No.1, pp. 31-74.
- Lee, Lung-fei, Ji Li and Xu Lin (2007), 'Binary Choice Models with Social Network under Heterogeneous Rational Expectations'.
- Liu, Xiaodong, John Kagel and Lung-fei Lee (2011), 'Dynamic Discrete Choice Models with Lagged Social Interactions: With an Application to a Signaling Game Experiment.'
- Liu, Xiaodong, and Lung-fei Lee (2010), 'Identification and GMM Estimation of Social Interaction Models with Centrality.' *Journal of Econometrics* 159, pp. 99-115.
- Qu, Xi and Lung-fei Lee (2012), 'LM Tests for Spatial Correlation in Spatial Models with Limited Dependent Variables'. *Regional Science and Urban Economics* 42, pp. 430-445.
- Qu, Xi and Lung-fei Lee (2012), 'Locally Most Powerful Tests for Spatial Interactions in the Simultaneous SAR Tobit Model.'
- Shang, Qingyan and Lung-fei Lee (2011), 'Two-Step Estimation of Endogenous and Exogenous Group Effects,' *Econometric Reviews* 30(2), pp.173 - 207.

Snijders, Tom A. B., Johan Koskinen, and Michael Schweinberger (2010), 'Maximum Likelihood Estimation for Social Network Dynamics', *Annals of Applied Statistics*, Volume 4, Number 2, pp. 567-588.

**Any student who needs an accommodation based on the impact of a disability should contact the instructor as soon as possible to discuss ways to meet his or her special needs. Such students should also contact the OSU Office for Disability Services (292-3307).**