

## Term Information

Effective Term Spring 2021  
*Previous Value* Spring 2016

## Course Change Information

### What change is being proposed? (If more than one, what changes are being proposed?)

Changing the course to allow us to have the course offered as distance learning (DL)

### What is the rationale for the proposed change(s)?

We are concerned that disruptions of the flow of students will continue in future years. About 40% of our students are from China and 40% of our students are from Korea. It is very possible that in future years, there is a political standoff between the US and China, which prevents our students from receiving visas to enter the US. Or covid-19 might flare up in Korea but not in the US, so the Korean students cannot come to the US, but OSU sees no reason to institute an assurance process.

### What are the programmatic implications of the proposed change(s)?

(e.g. program requirements to be added or removed, changes to be made in available resources, effect on other programs that use the course)?

There are no major implications. It is being done to try to keep the program as close to normal as possible, under the circumstances, rather than to modify it.

Is approval of the request contingent upon the approval of other course or curricular program request? No

Is this a request to withdraw the course? No

## 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	8732
Course Title	Econometrics II
Transcript Abbreviation	Econometrics 2
Course Description	Generalized least squares; specification tests; generalized method of moments; endogenous regressors and simultaneous equation systems; panel data; nonlinear estimation; discrete and limited dependent variable models; and basic time-series analysis.
Semester Credit Hours/Units	Fixed: 4

## Offering Information

Length Of Course	14 Week, 7 Week
<i>Previous Value</i>	14 Week, 12 Week, 8 Week, 7 Week, 6 Week, 4 Week
Flexibly Scheduled Course	Never
Does any section of this course have a distance education component?	Yes
Is any section of the course offered	100% at a distance
<i>Previous Value</i>	No
Grading Basis	Letter Grade
Repeatable	No
Course Components	Recitation, Lecture
Grade Roster Component	Lecture

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Credit Available by Exam	No
Admission Condition Course	No
Off Campus	Never
Campus of Offering	Columbus

## Prerequisites and Exclusions

Prerequisites/Corequisites	Prereq: 8731 or equiv with permission of economics director of grad studies.
Exclusions	
<a href="#">Previous Value</a>	Not open to students with credit for 640, 740, 741, and 742.
Electronically Enforced	No

## Cross-Listings

Cross-Listings

## Subject/CIP Code

Subject/CIP Code	45.0603
Subsidy Level	Doctoral Course
Intended Rank	Doctoral

## Requirement/Elective Designation

Required for this unit's degrees, majors, and/or minors

## Course Details

Course goals or learning objectives/outcomes	<ul style="list-style-type: none"><li>• Student will develop advanced econometric skills that will help them to analyze economic data.</li></ul>
Content Topic List	<ul style="list-style-type: none"><li>• Generalized least squares</li><li>• Specification tests</li><li>• Generalized method of moments</li><li>• Endogenous regressors and simultaneous equation systems</li><li>• Panel data</li><li>• Nonlinear estimation</li><li>• Discrete and limited dependent variable models</li><li>• Basic time-series analysis</li></ul>
Sought Concurrence	No

**COURSE CHANGE REQUEST**  
8732 - Status: PENDING

Last Updated: Vankeerbergen, Bernadette  
Chantal  
11/04/2020

**Attachments**

- ASC DL Course Syllabus 8732 SP21.docx: Online syllabus  
*(Syllabus. Owner: Tobin, Ricky Mase)*
- Econ 8732.docx: ASC tech checklist  
*(Other Supporting Documentation. Owner: Tobin, Ricky Mase)*
- ECON 8732 (18276) - Blevins.pdf: In-person syllabus  
*(Syllabus. Owner: Tobin, Ricky Mase)*

**Comments**

**Workflow Information**

Status	User(s)	Date/Time	Step
Submitted	Tobin, Ricky Mase	11/02/2020 08:53 AM	Submitted for Approval
Approved	Azrieli, Yaron	11/02/2020 09:11 AM	Unit Approval
Approved	Haddad, Deborah Moore	11/02/2020 10:24 AM	College Approval
Pending Approval	Jenkins, Mary Ellen Bigler Hanlin, Deborah Kay Oldroyd, Shelby Quinn Vankeerbergen, Bernadette Chantal	11/02/2020 10:24 AM	ASCCAO Approval

# **SYLLABUS: ECON 8732**

## **ECONOMETRICS II**

### **SP21**

## **Course overview**

### **Instructor**

Instructor: Jason Blevins

Email address: [Blevins.141@osu.edu](mailto:Blevins.141@osu.edu)

Phone number: 292-6523

Class meets: via Zoom, Tues/Thurs. 9:30-10:55AM

Office hours: TBD via Zoom

Office Location: Arps Hall 451

Recitation hours      Friday 9:35 AM–10:55 AM

Recitation location    100% Online - Synchronous Delivery via CarmenZoom

Recitation leader: Yichun Song [song.1399@buckeyemail.osu.edu](mailto:song.1399@buckeyemail.osu.edu)>

Office hours    TBD

### **Course description**

This course is the second semester of the first-year Ph.D. sequence in econometrics. Students are assumed to have had completed Econ 8731 (or equivalent). The course will cover instrumental variables, generalized method of moments, simultaneous equation systems, panel data methods, nonlinear estimation, discrete and limited dependent variable models, and basic time-series analysis.

### **Course learning outcomes**

By the end of this course, students should successfully be able to:

- Be familiar with the topics covered above
- Be prepared to understand and perform research at a Ph.D. level in econometrics

## Course materials

### Required

The primary texts for this course are Hansen (2019) and Hayashi (2000)

Hansen, Bruce E. (2019). *Econometrics*. University of Wisconsin.

<http://www.ssc.wisc.edu/~bhansen/econometrics/>.

Hayashi, Fumio (2000). *Econometrics*. Princeton University Press.

However, material will also be drawn from other first-year graduate econometrics textbooks, such as the following:

Greene, William H. (2012). *Econometric Analysis*. Seventh ed. Prentice Hall.

Wooldridge, Jeffrey M. (2010). *Econometric Analysis of Cross Section and Panel Data*. Second ed. MIT Press.

If you are interested in econometrics, the following books might also be useful for leisure reading:

Amemiya, Takeshi (1985) *Advanced Econometrics*. Harvard University Press.

Billingsley, Patrick (1995). *Probability and Measure*. John Wiley and Sons.

## Course technology

For help with your password, university e-mail, Carmen, or any other technology issues, questions, or requests, contact the OSU IT Service Desk. Standard support hours are available at <https://ocio.osu.edu/help/hours>, and support for urgent issues is available 24x7.

- **Self-Service and Chat support:** <http://ocio.osu.edu/selfservice>
- **Phone:** 614-688-HELP (4357)
- **Email:** [8help@osu.edu](mailto:8help@osu.edu)
- **TDD:** 614-688-8743

### Baseline technical skills necessary for online courses

- Basic computer and web-browsing skills
- Navigating Carmen

### Technology skills necessary for this specific course

- Carmen Zoom text, audio, and video chat
- Ability to use Zoom

- Collaborating in CarmenWiki
- Recording a slide presentation with audio narration
- Recording, editing, and uploading video

### Necessary equipment

- Computer: current Mac (OS X) or PC (Windows 7+) with high-speed internet connection
- Webcam: built-in or external webcam, fully installed
- Microphone: built-in laptop or tablet mic or external microphone

### Necessary software

- Stata - Department licenses may be available, or short-term licenses may be purchased from <https://stata.com>. Stata support is obtainable at: <https://www.stata.com/support/> Stata privacy policy here: <https://www.stata.com/privacy-policy/> Accessibility policy here: <https://www.stata.com/features/section-508-compliance-15/>
- Matlab - A university-wide license is available. See <https://ocio.osu.edu/software>. Matlab support is available here: <https://www.mathworks.com/support.html> Privacy policy here: [https://www.mathworks.com/company/aboutus/policies\\_statements.html](https://www.mathworks.com/company/aboutus/policies_statements.html) Accessibility policy here: <https://www.mathworks.com/support/accessibility.html>

## Grading and faculty response

### Grades

Assignment or category	Points
Problem Sets (6 sets worth 5 each)	30
Midterm	30
Final	40
<b>Total</b>	<b>100</b>

*See course schedule, below, for due dates*

### Assignment information

There will be six problem sets, assigned approximately bi-weekly and due in class one week later. Due dates of assignments and exams will be announced in advance on Carmen and are available on the Carmen course calendar. The grade distribution will be:

Problem sets 30% 6 problem sets

Midterm examination 30% Due by 11:59 PM on February 28

Final examination 40% Due by 11:59 PM on April 29.

## Faculty feedback and response time

I am providing the following list to give you an idea of my intended availability throughout the course. (Remember that you can call **614-688-HELP** at any time if you have a technical problem.)

### Grading and feedback

For large weekly assignments, you can generally expect feedback within **7 days**.

### E-mail

I will reply to e-mails within **24 hours on school days**.

# Attendance, participation, and discussions

## Student participation requirements

- Students should attend all class sessions and email the instructor or TA if they are unable to attend.

## Other course policies

This course is 100% online. There are no required sessions when you must be logged in to Carmen at a scheduled time.

- *Lectures:* Lectures will be held synchronously using CarmenZoom. Lecture notes and recordings of lectures will be made available on Carmen.
- *Office Hours:* Office Hours will held using CarmenZoom.
  - Please schedule a meeting here: [calendly.com/blevins/meeting](https://calendly.com/blevins/meeting). To reduce waiting time, arrival times are listed in 15-minute increments. You can join the Zoom waiting room and I will admit you as soon as the previous meeting is over.
  - If all slots are taken, or if the time you need is not available, I will be happy to schedule

an alternative time.

- Meeting ID: TBD
- Password: TBD
- *Assignments:* Homework assignments and exams will be given in “take-home” format. Assignments will be posted on Carmen in PDF format and can be worked on at any time until the deadline. All assignments should be either typed electronically (e.g., using  $\LaTeX$ ) or scanned and uploaded to Carmen in PDF format. If you are hand-writing your assignments, please use a scanner or scanning app to produce a high-quality, legible PDF scan.
- *Discussions:* I will monitor the class discussion board for questions. I am also available via email, but if you have a question that would benefit others (most likely anything not specifically about your grades or anything private), please ask in class or post a question to the discussion board for the benefit of others.
- *Pace of Activities:* Students are expected to keep pace with the twice-weekly lectures and deadlines for homework and exams. Students may schedule their efforts freely within those time frames.

*Participation:* All live, scheduled events for the course, including office hours, are optional. Recordings of lectures will be made available for watching later.

## Student academic services

Student academic services offered on the OSU main campus

<http://advising.osu.edu/welcome.shtml>.

## Student support services

Student support services offered on the OSU main campus <http://ssc.osu.edu>.

## Academic integrity policy

### Policies for this online course

- **Quizzes and exams:** You must complete the midterm and final exams yourself, without any external help or communication. Weekly quizzes are included as self-checks without points attached.
- **Problem sets:** You may discuss the homework with other students, but you must prepare your answers yourself.



## Ohio State's academic integrity policy

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://studentlife.osu.edu/csc/>.

## Copyright disclaimer

The materials used in connection with this course may be subject to copyright protection and are only for the use of students officially enrolled in the course for the educational purposes associated with the course. Copyright law must be considered before copying, retaining, or disseminating materials outside of the course.

## Statement on title IX

Title IX makes it clear that violence and harassment based on sex and gender are Civil Rights offenses subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories (e.g., race). If you or someone you know has been sexually harassed or assaulted, you may find the appropriate resources at <http://titleix.osu.edu> or by contacting the Ohio State Title IX Coordinator, Kellie Brennan, at [titleix@osu.edu](mailto:titleix@osu.edu)

## Accessibility accommodations for students with disabilities

The University strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers based on your disability (including mental health, chronic or temporary medical conditions), please let me know immediately so that we can privately discuss options. To establish reasonable accommodations, I may request that you register with Student Life Disability Services. After registration, make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion. SLDS contact information: [slds@osu.edu](mailto:slds@osu.edu); 614-292-3307; [slds.osu.edu](http://slds.osu.edu); 098 Baker Hall, 113 W. 12th Avenue.

### Accessibility of course technology

This online course requires use of Carmen (Ohio State's learning management system) and other online communication and multimedia tools. If you need additional services to use these technologies, please request accommodations with your instructor.

- [Carmen \(Canvas\) accessibility](#)
- Streaming audio and video
- Synchronous course tools
- MatLab Accessibility policy here: <https://www.mathworks.com/support/accessibility.html>
- Stata Accessibility policy here: <https://www.stata.com/features/section-508-compliance-15/>

## Your mental health!

As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student's ability to participate in daily activities. The Ohio State University offers services to assist you with addressing these and other concerns you may be experiencing. If you or someone you know are suffering from any of the aforementioned conditions, you can learn more about the broad range of confidential mental health services available on campus via the Office of Student Life's Counseling and Consultation Service (CCS) by visiting [ccs.osu.edu](http://ccs.osu.edu) or calling 614- 292-5766. CCS is located on the 4th Floor of the Younkin Success Center and 10th Floor of Lincoln Tower. You can reach an on call counselor when CCS is closed at 614-292-5766 and 24 hour emergency help is also available

through the 24/7 National Suicide Prevention Hotline at 1-800-273- TALK or at [suicidepreventionlifeline.org](http://suicidepreventionlifeline.org)

## Course schedule (tentative)

- Week 1: Instrumental Variables
- Week 2: Instrumental Variables
- Week 3: Specification tests
- Week 4: Generalized Method of Moments
- Week 5: Panel Data
- Week 6: Panel Data
- Week 7: Midterm Exam
- Week 8: Serial Correlation
- Week 9: Consistency of Extremum Estimators
- Week 10: Asymptotic Normality of Extremum Estimators
- Week 11: Hypothesis Testing
- Week 12: Computation and Discrete Response Models
- Week 13: Truncated and Censored Regression
- Week 14: Review of material

Final exam date TBD

# Syllabus

Class dates	January 9–April 16, 2020
Class hours	Thursday, 9:30 AM–12:15 PM
Class location	Ramseyer Hall 110
Instructor	Jason Blevins <blevins.141@osu.edu>
Office	Arps 452
Office hours	Monday 11:00 AM–12:00 PM
Recitation hours	Friday 9:35AM–10:55AM
Recitation location	Jennings Hall 140
Recitation leader	Yichun Song <song.1399@buckeyemail.osu.edu>
Office	Arps 304
Office hours	Tuesday 9:00 AM–11:00 AM

## Course Description

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## Textbooks and Reading Materials

The required text for this course is Hayashi (2000), however material will also be drawn from other first-year graduate econometrics textbooks, such as the following:

- Hayashi, Fumio (2000). *Econometrics*. Princeton University Press.
- Greene, William H. (2012). *Econometric Analysis*. Seventh ed. Prentice Hall.
- Hansen, Bruce E. (2019). *Econometrics*. University of Wisconsin.  
<http://www.ssc.wisc.edu/~bhansen/econometrics/>.
- Wooldridge, Jeffrey M. (2010). *Econometric Analysis of Cross Section and Panel Data*. Second ed. MIT Press.

If you are interested in econometrics, the following books might also be useful for leisure reading:

- Amemiya, Takeshi (1985) *Advanced Econometrics*. Harvard University Press.
- Billingsley, Patrick (1995). *Probability and Measure*. John Wiley and Sons.

- Engle, Robert F. and Daniel McFadden (Eds.) (1994). *Handbook of Econometrics*, Volume 4. North Holland.
- Hamilton, James (1994). *Time Series Analysis*. Princeton University Press.
- van der Vaart, A. W. (1998). *Asymptotic Statistics*. Cambridge University Press.

## Course Schedule

This is a *tentative* weekly schedule and is subject to change.

1. January 9: Instrumental Variables
2. January 16: Instrumental Variables
3. January 23: Specification tests
4. January 30: Generalized Method of Moments
5. February 6: Panel Data
6. February 13: Panel Data
7. February 20: Midterm Exam
8. February 27: Serial Correlation
9. March 5: Consistency of Extremum Estimators
10. March 12: Spring Break
11. March 19: Asymptotic Normality of Extremum Estimators
12. March 26: Hypothesis Testing
13. April 2: Computation and Discrete Response Models
14. April 9: Truncated and Censored Regression
15. April 16: Revision of material

## Assignments and Exams

There will be six problem sets, assigned approximately bi-weekly, usually due in class one week later. The grade distribution will be:

Problem sets	30%	6 problem sets
Midterm examination	30%	February 20 (in class)
Final examination	40%	Date to be determined

## Policies

- *Group Work:* Students are encouraged to work in groups to discuss homework assignments, but each student must turn in their own independent work.
- *Attendance:* Students are expected to attend each class and are responsible for all material covered in class. Exams will be based on material covered in class, readings, and assignments.
- *Email:* I will attempt to respond to e-mail in a timely manner, but cannot guarantee responses before class deadlines. Please plan accordingly.
- *Exams:* A student expecting to miss an exam give an acceptable explanation and make arrangements *in advance*. Note that personal travel or vacation plans are not acceptable reasons for missing an exam. If a student misses an exam without prior arrangement, then a grade of zero will be assigned unless the student provides documentation of a medical condition, emergency, or other unavoidable situation which made it impossible to take the exam. In the case of an excused absence from an exam, a makeup exam will be scheduled.
- *Homework:* The previous policy also applies to late homework assignments, which will not be accepted except in special circumstances as described above. If you are unable to attend class when the homework is due, you must make arrangements to turn it in beforehand. Please turn in paper copies of homework unless we have made other arrangements. Cell phone pictures of homework assignments will not be accepted.

## Student Life Disability Services

The University strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers based on your disability (including mental health, chronic or temporary medical conditions), please let me know immediately so that we can privately discuss options. You are also welcome to register with Student Life Disability Services to establish reasonable accommodations. After registration, make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion. SLDS contact information: [slds@osu.edu](mailto:slds@osu.edu); (614) 292-3307; [slds.osu.edu](http://slds.osu.edu); 098 Baker Hall, 113 W. 12th Avenue.

## Code of Student Conduct

### *Academic Integrity (Academic Misconduct)*

Academic integrity is essential to maintaining an environment that fosters excellence in teaching, research, and other educational and scholarly activities. Thus, The Ohio State University and the Committee on Academic Misconduct (COAM) expect that all students have read and understand the University's Code of Student Conduct, and that all students will complete all academic and scholarly assignments with fairness and honesty. Students must recognize that failure to follow the rules and guidelines established in the University's Code of Student Conduct and this syllabus may constitute "Academic Misconduct."

The Ohio State University's Code of Student Conduct (Section 3335-23-04) defines academic misconduct as: "Any activity that tends to compromise the academic integrity of the University, or subvert the educational process." Examples of academic misconduct include (but are not limited to) plagiarism, collusion (unauthorized collaboration), copying the work of another student, and possession of unauthorized materials during an examination. Ignorance of the University's Code of Student Conduct is never considered an "excuse" for academic misconduct, so I recommend that you review the Code of Student Conduct and, specifically, the sections dealing with academic misconduct.

If I suspect that a student has committed academic misconduct in this course, I am obligated by University Rules to report my suspicions to the Committee on Academic Misconduct. If COAM determines that you have violated the University's Code of Student Conduct (i.e., committed academic misconduct), the sanctions for the misconduct could include a failing grade in this course and suspension or dismissal from the University.

If you have any questions about the above policy or what constitutes academic misconduct in this course, please contact me.

Other sources of information on academic misconduct (integrity) to which you can refer include:

- The Committee on Academic Misconduct:  
<http://www.oaa.osu.edu/coam/home.html>
- Ten Suggestions for Preserving Academic Integrity:  
<http://www.oaa.osu.edu/coam/ten-suggestions.html>
- Eight Cardinal Rules of Academic Integrity:  
<http://www.northwestern.edu/uacc/8cards.html>

## Arts and Sciences Distance Learning Course Component Technical Review Checklist

**Course: ECON 8732**

**Instructor: Jason Blevins**

**Summary: Econometrics II**

Standard - Course Technology	Yes	Yes with Revisions	No	Feedback/ Recomm.
6.1 The tools used in the course support the learning objectives and competencies.	X			<ul style="list-style-type: none"> <li>• Office 365</li> <li>• Carmen</li> <li>• Stata</li> <li>• Matlab</li> </ul>
6.2 Course tools promote learner engagement and active learning.	X			<ul style="list-style-type: none"> <li>• CarmenZoom</li> <li>• CarmenWiki</li> <li>• Carmen Discussion Boards</li> </ul>
6.3 Technologies required in the course are readily obtainable.	X			All tools are available via OSU site license free of charge.
6.4 The course technologies are current.	X			All are updated regularly.
6.5 Links are provided to privacy policies for all external tools required in the course.	X			All privacy policies are included.
Standard - Learner Support				
7.1 The course instructions articulate or link to a clear description of the technical support offered and how to access it.	X			Links to 8HELP, stata and matlab are provided.
7.2 Course instructions articulate or link to the institution's accessibility policies and services.	X			a
7.3 Course instructions articulate or link to an explanation of how the institution's academic support services and resources can help learners succeed in the course and how learners can obtain them.	X			b
7.4 Course instructions articulate or link to an explanation of how the institution's student services and resources can help learners succeed and how learners can obtain them.	X			c
Standard – Accessibility and Usability				
8.1 Course navigation facilitates ease of use.	X			Recommend using the Carmen Distance Learning "Master Course" template developed by ODEE and available in the Canvas Commons to provide student-users with a consistent user experience in terms of navigation and access to course content.
8.2 Information is provided about the accessibility of all technologies required in the course.	X			Accessibility policies for Matlab and Stata are present..
8.3 The course provides alternative means of access to course materials in formats that meet the needs of diverse learners.	X			Instructions are provided to obtain materials in another format.
8.4 The course design facilitates readability	X			
8.5 Course multimedia facilitate ease of use.	X			All assignments and activities that use the Carmen LMS with embedded multimedia facilitates ease of use. All other multimedia resources facilitate ease of use by being available through a standard web browser



## Reviewer Information

- Date reviewed: 11/2//20
- Reviewed by: Ian Anderson

## Notes: Looks good!

<sup>a</sup>The following statement about disability services (recommended 16 point font):  
Students with disabilities (including mental health, chronic or temporary medical conditions) that have been certified by the Office of Student Life Disability Services will be appropriately accommodated and should inform the instructor as soon as possible of their needs. The Office of Student Life Disability Services is located in 098 Baker Hall, 113 W. 12th Avenue; telephone 614- 292-3307, [slds@osu.edu](mailto:slds@osu.edu); [slds.osu.edu](http://slds.osu.edu).

<sup>b</sup>Add to the syllabus this link with an overview and contact information for the student academic services offered on the OSU main campus.

<http://advising.osu.edu/welcome.shtml>

<sup>c</sup>Add to the syllabus this link with an overview and contact information for student services offered on the OSU main campus. <http://ssc.osu.edu>. Also, consider including this link in the “Other Course Policies” section of the syllabus.