

AGEC 64400: Agricultural Trade Theory

Spring 2018

SYLLABUS

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Office Hours: Tuesday 3-4 PM, or by appointment

Lectures

Tuesday, Thursday 1:30pm -2:45pm KRAN G005

Course Description

This course is designed to improve your understanding of the microeconomic theory of general equilibrium, to develop your knowledge of the theory of international trade, and to improve your capacity to represent theories of international trade and international trade policy interventions in computational models.

Prerequisites

Students should have been familiar with constrained optimization problems (as in AGECE 552). Graduate level training in Microeconomic theory is also expected. Producer and consumer theory as well as the general equilibrium are the microeconomic topics that are most relevant.

Learning Outcomes

On successful completion of this subject you should be able to derive from first principles the basic textbook models of international trade in algebraic form, to represent the models computationally and manipulate them with policy and other shocks. You should also be able to critically assess the models in terms of their assumptions and implications, and to discuss supplementary research that qualifies and extends the basic models.

Reading

The required textbook (denoted “MMKM” in the schedule below) is

Markusen, James, James Melvin, William Kaempfer and Keith Maskus, International Trade: Theory and Evidence, 1st Edition, McGraw Hill Publishing Co., 1995. The textbook is available for free download at: https://mpr.ub.uni-muenchen.de/21989/1/MPRA_paper_21989.pdf.

We shall make considerable use of microeconomic theory tools, especially those related to duality. The level of rigor is approximately that which is contained in the recommended text (denoted “NS” in the schedule below). The recommended text is for purposes of review or remediation. Any edition of the recommended text is suitable. I will be working from

Nicholson, Walter and Christopher Snyder, Microeconomic Theory, 10th edition, Thomson South Western, 2008, ISBN: 978-0324585070.

A useful reference for improving your understanding of GAMS models is James Markusen’s web site. See in particular the slides marked “old version” at the link: <http://spot.colorado.edu/~markusen/teaching.html>. These are denoted “JM notes” in the slides below.

Supplementary readings will also be assigned. These are generally obtainable via Google Scholar.

Copies of the two textbooks have been made available at the reserve desk in the Parrish Library in the Krannert building.

Academic Integrity

Students are reminded of the Purdue Honors Pledge:

As a Boilermaker pursuing academic excellence, I pledge to be honest and true in all that I do. Accountable together - we are Purdue.

The University policy on academic dishonesty is as follows:

Purdue prohibits "dishonesty in connection with any University activity. Cheating, plagiarism, or knowingly furnishing false information to the University are examples of dishonesty." [Part 5, Section III-B-2-a, Student Regulations] Furthermore, the University Senate has stipulated that "the commitment of acts of cheating, lying, and deceit in any of their diverse forms (such as the use of substitutes for taking examinations, the use of illegal cribs, plagiarism, and copying during examinations) is dishonest and must not be tolerated. Moreover, knowingly to aid and abet, directly or indirectly, other parties in committing dishonest acts is in itself dishonest." [University Senate Document 72-18, December 15, 1972]

Acts of academic dishonesty will not be tolerated in this class.

Grading

60% homework.

40% final examination

Students will be assigned five homework assignments during the term, each equally weighted in their final grade.

The **final examination** will be given the week of **April 29-May 4**, at a time yet to be determined. This will be a take-home examination.

Grades: It is my first time teaching this course, so I will curve (generously). The material can be mastered so it is possible that everyone will get an A. PhD students will be held to a somewhat higher standard than Masters students.

General Course Policies

As a general courtesy to me and to the other students in the class, please put your cell phones on silent mode. As a matter of courtesy to others you are also encouraged to avoid entering late or exiting early.

Attendance

You are encouraged to attend every lecture.

Counseling and Psychological Services

Purdue University is committed to advancing the mental health and well-being of its students. If you or someone you know is feeling overwhelmed, depressed, and/or in need of support, services are available. For help, such individuals should contact Counseling and Psychological Services (CAPS) at (765)494-6995 and <http://www.purdue.edu/caps/> during and after hours, on weekends and holidays, or through its counselors physically located in the Purdue University Student Health Center (PUSH) during business hours.

Accessibility and Accommodations

Purdue University strives to make learning experiences as accessible as possible. If you anticipate or experience physical or academic barriers based on disability, you are welcome to let me know so that we can discuss options. You are also encouraged to contact the Disability Resource Center at: drc@purdue.edu or by phone: 765-494-1247.

Nondiscrimination

Purdue University prohibits discrimination against any member of the University community on the basis of race, religion, color, sex, age, national origin or ancestry, genetic information, marital status, parental status, sexual orientation, gender identity and expression, disability, or status as a veteran. The University will conduct its programs, services and activities consistent with applicable federal, state and local laws, regulations and orders and in conformance with the procedures and limitations as set forth in [Executive Memorandum No. D-1](#), which provides specific contractual rights and remedies. Any student who believes they have been discriminated against may visit www.purdue.edu/report-hate to submit a complaint to the Office of Institutional Equity. Information may be reported anonymously.

Lecture Outline (tentative)

- Week 1
1/8-1/10
- Introduction and overview, Consumer theory, Lagrangian optimization, Indirect Utility and Expenditure Functions.
- Reading:
NS Ch. 2-6
MMKM Ch 3, Appendix 1
- Week 2
1/15- 1/17
- Kuhn-Tucker conditions; mixed complementarity in partial equilibrium
- Reading:
NS Ch. 12
JM notes: Ch. 2
- Week 3:
1/22-1/24
- Profit, cost and revenue functions
- Reading:
MMKM Ch. 2
NS Chs. 9-11
- Week 4
1/29-1/31
- Single-country general equilibrium and welfare
- Reading:
NS Ch. 13
MMKM Ch. 4
JM notes: Ch. 3
- Baumol, William J. (1996), 'Children of Performing Arts, the Economic Dilemma: The Climbing Costs of Health Care and Education', *Journal of Cultural Economics*, 20, 183–206.
- Weeks 5-6
2/5-2/7,
2/12-2/14
- General equilibrium and the standard model of international trade
- Reading
MMKM Chs. 4-5, Appendix 2
- Devarajan, Shantayanan, et al. 1997. "Simple general equilibrium modeling." *Applied methods for trade policy analysis: A handbook*: 156-183.
- Week 7
2/19-2/21
- The Ricardian model
- Related Reading
MMKM Ch 7
- Daniel M. Bernhofen and John C. Brown. 2004. "A direct test of the theory of comparative advantage: the case of Japan." *Journal of Political Economy* 112.1: 48-67.

- Week 8
2/26-2/28
- The Heckscher-Ohlin model
- Reading
MMKM Ch 8, Appendix 3
- Jones, Ronald W. 1965. "The structure of simple general equilibrium models." *Journal of Political Economy* 73.6: 557-572.
- Xu, Bin. 2001. "Factor bias, sector bias, and the effects of technical progress on relative factor prices." *Journal of International Economics* 54.1: 5-25.
- Week 9
3/6-3/8
- Specific factors and the Dutch disease
- Related Reading
MMKM Ch 9, Appendix 4
- Corden, W. M. and J. P. Neary 1982, "Booming Sector and De-Industrialisation" *The Economic Journal* 92, pp. 825-848.
- Week 10
3/19 - 3/21:
- Economies of scale / Reciprocal Dumping / External economies
- Related Reading
MMKM Chs 11-12
JM notes: Chs. 5, 7, 9
- Brander, J. and P. Krugman, 1983, "A Reciprocal Dumping Model of International Trade" *Journal of International Economics* 15, 313-323.
- Friberg, Richard and Mattias Ganslandt, 2006, "An Empirical Assessment of the Welfare Effects of Reciprocal Dumping" *Journal of International Economics* 70, 1-24.
- Week 11:
3/26-3/28
- Firm heterogeneity
- Reading
Bernard, Andrew, J. Bradford Jensen, Stephen Redding, and Peter Schott, 2007, "Firms in International Trade" *Journal of Economic Perspectives*, 21(3) 105-130.
- Melitz, Marc J. 2003. "The impact of trade on intra-industry reallocations and aggregate industry productivity." *Econometrica* 71.6: 1695-1725.
- Balistreri, Edward J., Russell H. Hillberry, and Thomas F. Rutherford. 2010. "Trade and welfare: Does industrial organization matter?." *Economics Letters* 109.2: 85-87.

Week 12:
4/2-4/4

The gravity and Armington models of international trade

Reading

MMKM Ch 21

Anderson, James E. 1979. "A theoretical foundation for the gravity equation." *The American Economic Review* 69.1: 106-116.

McCallum, John. 1995. "National borders matter: Canada-US regional trade patterns." *The American Economic Review* 85.3: 615-623.

Arkolakis, Costas, Arnaud Costinot, and Andrés Rodríguez-Clare. 2012. "New trade models, same old gains?." *American Economic Review* 102.1: 94-130.

Week 13:
4/9 - 4/11

Trade policy instruments

Reading

MMKM Chs 15, 16, 17, 20

JM notes: Ch, 6

Krugman, P., 1987, "Is Free Trade Passe?" *Journal of Economic Perspectives*, 1(2) 131-144.

Week 14:
4/16-4/18

Trade elasticities

Reading

Hillberry, R., & Hummels, D. 2013. Trade elasticity parameters for a computable general equilibrium model. In *Handbook of computable general equilibrium modeling* (Vol. 1, pp. 1213-1269). Elsevier.

Week 15
4/23-4/25

Trade agreements - multilateral and preferential

Related Reading

MMKM 18

Bagwell, Kyle, and Robert W. Staiger. 1999. "An economic theory of GATT." *American Economic Review* 89.1: 215-248.

Ossa, Ralph. 2011. "A "new trade" theory of GATT/WTO negotiations." *Journal of Political Economy* 119.1: 122-152.

Disclaimer

This syllabus is subject to change.