



**Department of Economics**  
**ECON 5304 W**  
**Topics in Industrial Organization**  
Winter 2022

Class: Thursdays 11:35am – 2:25pm, TB240  
Instructor: Zhiqi Chen  
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Office Hours: TBA

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### **Course Description**

Topics may include vertical restraints and vertical integration, innovation and research and development, network economics, contract theory, search theory and advertising, and industry studies.

### **Text**

There is no required text for this course.

### **Useful References**

Belleflamme, Paul and Martin Peitz, *Industrial Organization: Markets and Strategies*, Cambridge University Press 2010

Armstrong, Mark, and Robert Porter, *Handbook of Industrial Organization*, volume 3, Amsterdam: North-Holland, 2007

Schmalensee, Richard, and Robert Willig, *Handbook of Industrial Organization*, volumes 1 and 2, Amsterdam: North-Holland, 1989

Church, Jeffrey and Roger Ware, *Industrial Organization: A Strategic Approach*, Boston: Irwin McGraw-Hill 1999 (available online at <http://homepages.ucalgary.ca/~jrchurch/page4/page4.html>)

Martin, Stephen, *Advanced Industrial Economics*, 2<sup>nd</sup> edition, Oxford: Blackwell Publishing, 2001

Tirole, Jean, *Theory of Industrial Organization*, Cambridge: MIT Press, 1988

### **Topics**

- I. Vertical Integration**
- II. Resale Price Maintenance and Exclusive Territory**
- III. Exclusive Contracts**
- IV. Tying Arrangements**
- V. Buyer Power**

## Evaluation

Midterm Examination:	40% (To be held in class on March 17)
Research Paper:	35% (Due on April 7)
Presentation:	10%
Submission of Presentation Topic:	5% (due by February 10)
Class Participation:	10%

Research Paper: Each student will write a short literature survey on a topic related to industrial organization. The survey may cover 3 to 5 research papers on the chosen topic. The maximum length is 12 pages, in 12-point font and double-spaced.

Presentation: Each student will do a presentation on the topic of their literature survey. The schedule of presentations will be posted at Brightspace in early February.

Submission of Presentation Topic: Each student should submit the topic of their presentation via Brightspace by February 10. Each day of delay in the submission will result in a 1% deduction, with a maximum deduction of 5%, from the student's (team's) final grade.

Standing in a course is determined by the course instructor, subject to the approval of the Faculty Dean. This means that grades submitted by the instructor may be subject to revision. No grades are final until they have been approved by the Dean.

## Format of Classes

The class will meet in person at scheduled time every week. The midterm examination will be written in person as well.

## Course Materials

Student or professor materials created for this course (including presentations and posted notes, assignments and exams) remain the intellectual property of the authors. They are intended for personal use and may not be reproduced or redistributed without prior written consent of the author.

## Plagiarism

Please be aware that plagiarism is serious offence at Carleton and should be recognized and avoided. The University Senate defines plagiarism as "*presenting, whether intentionally or not, the ideas, expression of ideas or work of others as one's own.*" For further information, read "Academic Integrity and Offenses Conduct" at <https://carleton.ca/economics/courses/writing-preliminaries/academic-integrity-and-offenses-of-conduct/>.

## Requests for Academic Accommodation

You may need special arrangements to meet your academic obligations during the term. For an accommodation request, the processes are as follows:

### Pregnancy Obligation

Please write to me with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, visit the Equity Services website:

[carleton.ca/equity/wp-content/uploads/Student-Guide-to-Academic-Accommodation.pdf](http://carleton.ca/equity/wp-content/uploads/Student-Guide-to-Academic-Accommodation.pdf)

### Religious Obligation

Please write to me with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, visit the Equity Services website:

[carleton.ca/equity/wp-content/uploads/Student-Guide-to-Academic-Accommodation.pdf](http://carleton.ca/equity/wp-content/uploads/Student-Guide-to-Academic-Accommodation.pdf)

### Academic Accommodations for Students with Disabilities

The Paul Menton Centre for Students with Disabilities (PMC) provides services to students with Learning Disabilities (LD), psychiatric/mental health disabilities, Attention Deficit Hyperactivity Disorder (ADHD), Autism Spectrum Disorders (ASD), chronic medical conditions, and impairments in mobility, hearing, and vision. If you have a disability requiring academic accommodations in this course, please contact PMC at 613-520-6608 or [pmc@carleton.ca](mailto:pmc@carleton.ca) for a formal evaluation. If you are already registered with the PMC, contact your PMC coordinator to send me your Letter of Accommodation at the beginning of the term, and no later than two weeks before the first in-class scheduled test or exam requiring accommodation (if applicable). After requesting accommodation from PMC, meet with me to ensure accommodation arrangements are made. Please consult the PMC website ([carleton.ca/pmc](http://carleton.ca/pmc)) for the deadline to request accommodations for the formally-scheduled exam (if applicable).

### Survivors of Sexual Violence

As a community, Carleton University is committed to maintaining a positive learning, working and living environment where sexual violence will not be tolerated, and where survivors are supported through academic accommodations as per Carleton's Sexual Violence Policy. For more information about the services available at the university and to obtain information about sexual violence and/or support, visit:

<https://carleton.ca/equity/sexual-assault-support-services>

### Accommodation for Student Activities

Carleton University recognizes the substantial benefits, both to the individual student and for the university, that result from a student participating in activities beyond the classroom experience. Reasonable accommodation must be provided to students who compete or perform at the national or international level. Write to me with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, see the policy: <https://carleton.ca/senate/wp-content/uploads/Accommodation-for-Student-Activities-1.pdf>

## Reading List

### I. Vertical Integration

Allain, M.-L., C. Chamolle and P. Rey (2016), "Vertical Integration as a Source of Hold-up," *Review of Economic Studies*, 83(1): 1-25

Levy, N., Y. Spiegel & D. Gilo (2018), "Partial Vertical Integration, Ownership Structure, and Foreclosure," *American Economic Journal: Microeconomics*, 10(1), pp. 132-180

Ordover, J.A., G. Saloner and S. C. Salop (1990), "Equilibrium Vertical Foreclosure" *The American Economic Review*, 80, No. 1 (Mar., 1990), pp. 127-142

Ordover, J.A., G. Saloner and S. C. Salop (1992), "Equilibrium Vertical Foreclosure: Reply," *The American Economic Review*, 82, No. 3, pp. 698-703

Perry, M.K. (1989) "Vertical Integration: Determinants and Effects," in *Handbook of Industrial Organization*, volume 1

Reiffen, D. (1992) "Equilibrium Vertical Foreclosure: Comment," *The American Economic Review*, Vol. 82, pp. 694 - 697

Salop, S.C. and D.T. Scheffman (1983) "Raising Rivals' Costs," *The American Economic Review Papers and Proceedings*, 73, No.2, pp267 – 271

Schmalensee, R. (1973) "A Note on the Theory of Vertical Integration," *Journal of Political Economy*, 81: 442 – 449

Vernon, J. and D. Graham (1971) "Profitability of Monopolization by Vertical Integration," *Journal of Political Economy*, 79: 924 – 925

## **II. Resale Price Maintenance and Exclusive Territory**

Bernheim, B.D., and M.D. Whinston (1985) "Common Marketing Agency as a Device for Facilitating Collusion" *RAND Journal of Economics*, 16: 269-281

Gabrielsen, T.S. and B.O. Johansen (2017) "Resale Price Maintenance with Secret Contracts and Retail Service Externalities," *American Economic Journal: Microeconomics*, 9(1): 63–87

Hunold, M. and J. Muthers (2017) "Resale Price Maintenance and Manufacturer Competition for Retail Services," *RAND Journal of Economics*, 48: 3–23

Jullien, B., and P. Rey (2007) "Resale Price Maintenance and Collusion," *RAND Journal of Economics*, 38: 983-1001

Katz, M.L. (1989) "Vertical contractual relations," in *Handbook of Industrial Organization*, vol. 1

Winter, R.A. (1993) "Vertical Control and Price versus Nonprice Competition," *Quarterly Journal of Economics*, 108: 61 – 76

## **III. Exclusive Contracts**

Aghion, P. and P. Bolton (1987) "Contracts as Barriers to Entry," *American Economic Review*, 77: 388 – 401

Calzolari, G. and V. Denicolò (2013) "Competition with Exclusive Contracts and Market-Share Discounts." *American Economic Review*, 103(6):2384-2411

Calzolari, G. and V. Denicolò. (2015) "Exclusive Contracts and Market Dominance." *American Economic Review*, 105(11):3321-51

Chen, Z. and G. Shaffer (2014) "Naked Exclusion with Minimum-Share Requirements," *RAND Journal of Economics*, 45(1): 64–91

Mathewson, G.F. and R.A. Winter (1987) "The Competitive Effects of Vertical Agreements: Comment," *American Economic Review*, 77: 1057 – 1062

Rasmusen, E.B., J.M. Ramseyer and J.S. Wiley, Jr. (1991) "Naked Exclusion," *American Economic Review*, 81: 1137 – 1145

Segal, I.R. and M.D. Whinston (2000) "Naked Exclusion: Comment," *American Economic Review*, 90: 296 – 309

#### **IV. Tying Arrangements**

Carlton, D.W. and M. Waldman (2002) "The Strategic Use of Tying to Preserve and Create Market Power in Evolving Industries," *RAND Journal of Economics*, 33: 194 – 220

Chen, Z. and T.W. Ross (1993) "Refusal to Deal, Price Discrimination and Independent Service Organizations," *Journal of Economics and Management Strategy*, 2: 593-614

Chen, Z., T.W. Ross and W. Stanbury (1998) "Refusals to Deal and Aftermarkets," *Review of Industrial Organization*, 13: 131-151

Miao, C. (2010) "Consumer Myopia, Standardization and Aftermarket Monopolization," *European Economic Review*, 54: 931-946

Whinston, M.D. (1990) "Tying, Foreclosure, and Exclusion," *American Economic Review*, 80: 837 – 859

#### **V. Buyer Power**

Caprice, S. and P. Rey (2015) "Buyer Power from Joint Listing Decision," *Economic Journal*, 125:1677–1704

Chen, Z. (2003) "Dominant Retailers and Countervailing Power Hypothesis," *RAND Journal of Economics*, 34: 612 - 625

Chen, Z. (2008) "Defining Buyer Power," *Antitrust Bulletin*, 53(2): 241 - 250

Chen, Z. (2019) "Supplier Innovation in the Presence of Buyer Power," *International Economic Review*, volume 60, issue 1 (February 2019), 329-353

Dobson, P.W. and M. Waterson (1997) "Countervailing Power and Consumer Prices," *Economic Journal*, 107: 418 - 430

Inderst, R. and C. Wey (2007) "Buyer Power and Supplier Incentives," *European Economic Review*, 51: 647 – 667

Shaffer, G. (1991) "Slotting Allowances and Resale Price Maintenance: A Comparison of Facilitating Practices," *RAND Journal of Economics*, 22: 120 - 135

Von Ungern-Sternberg, T. (1996) "Countervailing Power Revisited," *International Journal of Industrial Organization*, 14: 507 - 520