# Syllabus for Economics of Network Industries, ECON 104 Winter 2011

### **Professor Silke Forbes**

Office: Economics 229 Office hours: Wednesdays, 1:00-2:30 Course webpage: On WebCT (<u>webct.ucsd.edu</u>).

Prerequisites: ECON 100C or approval of instructor.

## Required Textbooks (required sections outlined below):

- o Shy, Oz, The Economics of Network Industries, Cambridge University Press 2001.
- Evans, David S., Andrei Hagiu, and Richard Schmalensee, *Invisible Engines*, MIT Press
  2006 (free download available at mitpress.mit.edu) (EHS)

## **Course outline:**

- 1. Introduction
- 2. Game Theory Tools
  - Shy, Appendix A-C
- 3. Network Externalities and Brand Preferences
  - Shy, Chapter 2.1-2.2
- 4. Software Variety and Software Piracy
  - Shy, Chapter 3.1-3.3 and 3.5
  - Rob, Rafael and Joel Waldfogel (2006), "Piracy on the High C's: Music Downloading, Sales Displacement, and Social Welfare in a Sample of College Students", *Journal of Law & Economics* 49(1).
- 5. Switching costs
  - Shy, Chapter 8.1-8.2
  - Knittel, Christopher and Victor Stango (2009) "How Does Incompatibility Affect Prices? Evidence from ATMs", *Journal of Industrial Economics* 57(3), September 2009.

- 6. Topics in the Economics of the Internet
  - Edelman, Benjamin (2009), "Priced and Unpriced Online Markets", *Journal of Economic Perspectives* 23 (3), pp. 21-36.
  - Evans, David S. (2009), "The Online Advertising Industry: Economics, Evolution and Privacy", *Journal of Economic Perspectives* 23 (3), pp. 37-60.
  - Varian, Hal (2009), "Online Ad Auctions", American Economic Review
  - Varian, Hal (2006), "Position Auctions", *International Journal of Industrial Organization*
  - Lee, Robin S. and Tim Wu (2009), "Subsidizing Creativity through Network Design: Zero-Pricing and Net Neutrality", *Journal of Economic Perspectives* 23 (3), pp. 61-76.
- 7. Technology Adoption and Standardization
  - Augereau, Angelique, Shane Greenstein and Marc Rysman (2006),
    "Coordination vs. Differentiation in a Standards War: 56K Modems",
    RAND Journal of Economics 37(4), 887-909.
  - Bresnahan, Timothy and Pai-Ling Yin (2005), "Economic and Technical Drivers of Technology Choice: Browsers", *Annales d'Economie et de Statistique* 79/80, pp. 629-670.
  - Simcoe, Timothy (2010), "Standard Setting Committees: Consensus Governance for Shared Technology Platforms", *Working Paper*, Boston University.
- 8. Two-sided platforms: General Insights
  - EHS, Chapter 3
  - Rysman, Marc (2009), "", Journal of Economic Perspectives 23, Summer 2009, 125-144.
  - Bajari, Patrick and Ali Hortacsu (2004), "Economic Insights from Internet Auctions", *Journal of Economic Literature* 42, pp. 457-486.
  - Cabral, Luis and Ali Hortacsu (2010), "Dynamics of Seller Reputation: Theory and Evidence from eBay", *Journal of Industrial Economics* 58(1)
- 9. Case studies of two-sided platforms
  - Personal computers: EHS, Chapter 4

- Video games: : EHS, Chapter 5
- Personal digital assistants: EHS, Chapter 6
- Mobile phones: : EHS, Chapter 7

10. Summary and Review

#### Grading:

Your grade will be based on one midterm exam (30% of the grade), a final exam (50% of the grade) and a term paper (20% of the grade).

## Exam dates:

Midterm: February 2, in class Final: March 14, 11:30-2:30

## Term paper:

#### Due date: February 28, in class

You will be required to write a 4-page term paper. As your topic, you may pick one of the four industries discussed in the EHS textbook, chapters 4-7 (personal computers, video games, personal digital assistants, mobile phones). Your paper should discuss the development of your industry from 2005 until now.

#### No classes on:

January 7, February 25