

# **TCN-6880 Telecommunications Public Policy Development and Standards**

## **Catalog Description**

A concept-oriented examination of the domestic and international telecommunications policy processes and standards setting environment. (3 credits)

## **Prerequisites**

Graduate Standing / permission of the instructor.

## **Type**

Elective for MSTN

## **Course Objectives**

This course covers public policy issues related to the telecommunications, networking and Information Technology industries (including the internet) from historical, present and future perspective. It addresses the evolution of the telecom industry public policy, the impact it has on reshaping our world, and the importance of government regulations, management and technical decisions in these industries. Examples include privacy, electronic signatures, digital divide, bandwidth auctions, IP telephone, internet taxation and wireless communication. Students will learn the legal and regulatory history of the industry to better understand the current issues confronting the marketplace. Through lectures, discussions, and project analyses, students gain a basic understanding of how the telecommunications public policy is being developed as well current issues.

## **Topics**

- History & Development of Telecommunications Industry (Why are firms regulated? Natural monopoly and market power, Economies of scale and scope, Public interest concepts and regulatory capture, Regulation vs. antitrust, Network externalities, Overview of services and players (access services, toll, local, other) and how they are regulated (who regulates what?). Traditional rate-of-return regulation and revenue requirement. Value of service pricing. Traditional patterns of cross-subsidy. The early history of telecommunications; the Communications Act of 1934; Partial history after 1934, the 1956 AT&T consent decree.)
- The Slow Development of Competition Before Divestiture
- Divestiture and Access Changes
- Alternative Regulatory Frameworks
- The Telecom Act of 1996 and FCC Orders
- The Economics of Networks and Regulations (Economics of Scale and Scope, Sunk Costs, Barriers to Entry, Unbundled Network Elements)
- Regulation and Deregulation (The Telecom Act of 1996, The effect of government regulation on the framework of competition)
- Competition in Local Services (Facilities Based Competition and regulation-based competition, From Wireline to Wireless)
- Competition for Residential Local and Long Distance (Bundling for Residential Local and Long Distance)
- Competition in Mobile and Wireless Communications, Competition in Wireless – Winning Strategies, Mobile Handset Market Value Chain)

- Internet Commerce in a Wireless World
- Competition where the Service Look to be increasingly like a Commodity with Little Differentiation
- Auction Theory (Is spectrum truly scarce? Does auctioning spectrum benefit the consumers?)
- Global Competition and International Regulations (The Act of 2000)
- The Effect of Convergence (Telecom companies, computer hardware & Software companies, cable operators to compete for voice and data traffic and integration of networks)
- Emerging Issues – privacy, security, privacy etc.

### **Textbook**

1. Jame Harry Green, The Irwin Handbook of Telecommunications (5<sup>th</sup> edition), McGraw Hill Professional,
2. International Telecommunication Regulations by ITU
3. Instructor will post readings on the website. When readings are posted, instructor will notify student
4. Most of the supplementary material assigned for each class -- nearly all of it -- will be on the World-Wide Web and class website. Students are responsible for using the Uniform Resource Location (URL) addresses provided on the website to locate the assigned material. The course syllabus itself will be on the Web, with links to all the assigned reading material.

### **Last Update**

Dr. Niki Pissinou 9/1/2012