Stevens Institute of Technology
School of Business

Syllabus

TM 612 — Regulation and Policy in the Telecommunications Industry

Semester: Spring 2022	**Course Schedule:** Monday 6:30 PM – 9:00 PM (EST) Course Canvas Address: https://sit.instructure.com/courses/46942/modules Prerequisite(s)/Corequisite(s)/Cross Listed Courses None Credits/Contact Hours: 3/3
Instructor and Contact Information: Dr. Raziq Yaqub ryaqub@stevens.edu, dr.raziq@gmail.com +1-908-319-8422 (https://www.linkedin.com/in/dyaqub/)	**Office Hours:** Monday 1:00 PM (Eastern time) until 04:00 PM For other times, I can set-up a Zoom or a phone call. Please contact to schedule an appointment. Class Website: Access through Canvas

Overview:

Access to advanced telecommunications networks and information systems from anywhere, anytime, and through any device, has made life far more productive. As networking technologies permeate our lives, they engage public policy and regulatory concerns ever more directly. Further, the technological innovations and the evolution of new services call for the public policies across many domains, including public safety, consumer privacy, system security, media diversity, and economic development. Thus new technologies and service offerings anticipate both public policy tussles and business strategy imperatives.

This course surveys the principles underpinning the US and international telecommunications policies, regulations, and laws. In particular, the course examines the legal and regulatory treatment of several related technologies, including wireline telephony, wireless mobile systems, cable, the Internet, and their convergence. The course focuses on how technologies gave birth to the administrative policies, statutory and regulatory laws, paying particular attention to the design and implementation of the Telecommunications Act of 1996. In addition, the course addresses the role of antitrust, intellectual property, and constitutional law in shaping our nation's telecommunications landscape. Finally, the course considers the critical role of antitrust enforcers, state public utility commissions, and the Federal Communications Commission in developing and administering the nation's telecommunications laws, regulations, and policies.

Topics discussed include the crossroads of telecommunication technologies, policies, and regulations. More specifically, a blend of information communication technologies, historical perspective of telecommunications as a regulated industry, effects of regulation on industry growth in pre-and post-divestiture environments; a special case of the divestiture of AT&T; government regulatory agencies and processes; management issues related to business between regulated and non-regulated corporations; tariff structures, rules and rate making in the regulated environment; Intellectual property, spectrum policy in the wireless telecommunications industry, policies and regulations across the Internet, broadband and wireless technologies; issues of privatization and deregulation in international telecommunications and their effects on global companies are also studied. Course objectives include: to establish a framework for analysis and interpretation of governmental policies on telecommunications at the local, state, national, and international levels; to review the history of government policies toward telecommunications and assess policy trends in regulation and deregulation; to discuss current policy issues in telecommunications and develop an understanding for formulating and evaluating strategies for businesses involved in telecommunications.

Depending on the available time, the instructor may enhance or reduce the course contents.

Introduction to the Course

- Challenging and comprehensive course.
- Quiz at the end of every class, and three term exams.
- All lecture notes and assignments will be available on the Canvas course web site.
- Weekly live synchronous Zoom lectures will be recorded and stored.
- The course calendar is located at the end of this syllabus. It is subject to changes.
- Homework are assigned weekly. The submission due date will be a week from the date of assignment.
- Homework submission is through the Canvas
- Please sign/upload on Canvas the Ethical Statement provided at the end. Contact me if you have questions.

Learning Goals

The student completing this course will be able to understand:

- Telecom Technologies, such as Internet, wired/wireless systems, Cybersecurity of critical infrastructure
- US laws and constitutional principles relevant to telecommunication technologies.
- Regulatory and judicial bodies' involvement in telecommunications.
- Policies and analysis related to the frequency spectrum, Voice over IP (VoIP), broadband access, Intellectual Property (IP) and Patents.
- Influence of open access, Internet governance, Internet and developing countries

Pedagogy

- The course comprises weekly live synchronous lectures delivered via Zoom
- Lectures will be posted on the Canvas after the delivery of the lecture
- There will be Chapter Review Questions (CRQ) at the end of every lecture

Textbook

Digital Crossroads: American Telecommunications Policy in the Internet Age Second Edition, Jonathan E. Nuechterlein and Philip J. Weiser, MIT Press, 2013, ISBN 978-0262519601 (paperback)

Required Reading

Chapters in the course textbook.

Additional Reading

Telecommunication Policy for the Information Age: From Monopoly to Competition, Gerald W. Brock, Harvard University Press, 1998 ISBN 978-0-674-87326-1 (paperback)

Assignments

Weekly comprehensive homework assignments

Home Assignment Rules, Mid Term/Final Exam Rules, Grading Procedure, etc. will be explained in the Zero Lecture (the first day of class) in deep detail. The zero lecture is very important to attend, as it will explain housekeeping, logistics, objectives, mutual expectations, course overview, course format, professor's introduction and professor's teaching philosophy, etc.

Grading

Letter Grade	**Numerical Grade**
A	90 and above
B	80 to 89
C	70 to 79
D	60 to 69
F	Below 60

Grading Procedure

Grades will be based on:	
Term tests Writing a Critique on a given article Homework CRQ (Chapter Review Questions) Extra Credit	60% 10% 15% 15% 15%

Ethical Conduct

The following statement is printed in the Stevens Graduate Catalog and applies to all students taking Stevens courses, on and off campus.

"Cheating during in-class tests or take-home examinations or homework is, of course, illegal and immoral. A Graduate Academic Evaluation Board exists to investigate academic improprieties, conduct hearings, and determine any necessary actions. The term 'academic impropriety' is meant to include, but is not limited to, cheating on homework, during in-class or take home examinations and plagiarism.

Consequences of academic impropriety are severe, ranging from receiving an "F" in a course, to a warning from the Dean of the Graduate School, which becomes a part of the permanent student record, to expulsion.

Reference *The Graduate Student Handbook, Academic Year 2003-2004 Stevens Institute of Technology, page 10.*

Consistent with the above statements, all homework exercises, tests and exams that are designated as individual assignments MUST contain the following signed statement before they can be accepted for grading.

I pledge on my honor that I have not given or received any unauthorized assistance on this assignment/examination. I further pledge that I have not copied any material from a book, article, the Internet or any other source except where I have expressly cited the source.

Signature _____ Date_____

Course/Teacher Evaluation

Continuous improvement can only occur with feedback based on comprehensive and appropriate surveys. Your feedback is an important contributor to decisions to modify course content/pedagogy which is why we strive for 100% class participation in the survey.

All course teacher evaluations are conducted on-line. You will receive an e-mail one week prior to the end of the course informing you that the survey site (https://www.stevens.edu/assess) is open along with instructions for accessing the site. Login using your myStevens (email) username and password. This is the same username and password you use for Canvas. Simply click on the course that you wish to evaluate and enter the information. All responses are strictly anonymous. We especially encourage you to clarify your position on any of the questions and give explicit feedbacks on your overall evaluations in the section at the end of the formal survey which allows for written comments. We ask that you submit your survey prior to the last class.

Course Schedule

Date	Lecture No.	Plan	Topic
Jan 24, 2022	Lecture 0	First Class	Objectives and Mutual Expectations
Jan 31	Lecture 1 & 2		Economic Principles, and Telecommunications Interconnections and OSI (Open System Interconnection)
Feb 07	Lecture 3 & 4		Communication Acts Wireless Technologies
Feb 14	Lecture 5 & 6		Wireless Technologies Regulations Spectrum and Spectrum Regulations
Feb 21		No Class	
Feb 28		Test-1	
Mar 07		Test Discussion	
Mar 14		No Class (Spg Brk)	
Mar 21	Lecture 7 & 8		Wireline Technologies
Mar 28	Lecture 09 & 10		Wireline Technologies Regulations
Apr 04		Test-2	
Apr 11		Test Discussion	
Apr 18	Lecture 11 & 12		Internet/Cyberspace Technologies and VoIP Internet/VoIP Regulations
Apr 25	Lecture 13 & 14		Cybersecurity and Regulations Technical Standards Organizations
May 02	Lecture 15 & 16	Last Class	Patents and Copyrights
May 09		Test-3 (Final)	
The order of lectures may be changed based on Professor's judgment and student's background knowledge			