Transportation and Communication Management in Science
Telecommunication Operations and Management
Draft Syllabus and Schedule

107.9.12

Week	Date	Domain Knowledge	Activity
1	09/15	Warm up and explain the syllabus & schedule Relationship between telecommunication and digital economy	Explain communication tools of the class The 1st Kahoot (Syllabus)
2	9/21 (Friday) 1:00 P.M.	Economics of Telecommunications Mid-Autumn Festival Adjustment The adjusted schedule requires confirmation for the classroom	Explain term project & The 2nd Kahoot (term project, 數位國家‧創新經濟發展方案)
3	10/02 (Tuesday) 6:00 P.M.	Economics of Telecommunications Teacher's Day Adjustment The adjusted schedule requires confirmation for the classroom (迎新宿營)	Business Proposal 1 Case study The 3rd Kahoot
4	10/08 (Monday)	Economics of Telecommunications Telecom Network (TCP/IP) The adjusted schedule	Business proposal 2
5	10/13	Telecom Network (TCP/IP)	Business proposal 3
6	10/20	Mobile technology and policy progress	Business proposal 4
7	10/27	Mobile technology and policy progress	Business proposal 5
8	11/03	Telecom data analysis Financial statement analysis & NCC data analysis	Cost versus revenue
9	11/10	Telecom data analysis Financial statement analysis & NCC data analysis	Cost versus revenue
10	11/19 (Monday)	Draft of term project presentation Adjustment of instructor's schedule	
11	11/024	Emerging telecommunication related technology (security and privacy)	Internet Trends Case study discussion
12	12/01	Emerging telecommunication related technology (security and privacy)	Internet Trends
13	12/08	Emerging telecommunication related technology (Cloud, AI and Blockchain)	Internet Trends
14	12/15	Emerging telecommunication related technology (Cloud, AI and Blockchain)	Internet Trends
15	12/22	Emerging telecommunication related technology (Cloud, AI and Blockchain)	Internet Trends
16	12/28 (Friday)	Presentation (term project) Adjustment for New Year Holidays	
17	1/05	Presentation (term project)	
18	1/12	Final Exam	

Grading:

1. Lecture attending, discussion and quiz 40% and assigned presentation
2. Project 40%: 25% presentation and 15% written report
3. Final exam 20%, and no midterm exam

Course requirements:

1. A networking smart phone (tablet PC):which means your mobile phone can download APP and access WiFi or 3G/4G to install Kahoot
2. Familiar with modern communication tools (we will play during the lecture)
3. Find your partners for term project for a team work (no two female students in a team)
4. Proactive in lecture discussion: raise questions, and express your opinions clearly and confidently
5. Practice English speaking and writing. Not only Chinese capability, but also English.

Remarks:

1. Learning goals: gain domain knowledge of telecommunication and apply strategic thinking to analyze and forecast the development of communication industry.
2. The offer would offer clear guideline of business proposal for the term project.
3. Enrich your domain knowledge of telecommunication industry to analyze and forecast its development and trend. The course would pay much attention on emerging technology based on telecommunication network, such as security, privacy, cloud service, AI, and blockchain. To reach this goal, it means we have to integrate what we have learned in economics, accounting, marketing, technology and management together. Be a management school student, whether you can exploit your expertise in these management courses to expand your capacity and capability would be a key issue to tell differences among other major students with sufficient competitive niche.
4. Activity of this semester would be linked closely with term project, and each group has to propose a telecommunication related service or product as its business plan. The detailed content of business plan would be addressed thoroughly to offer a blueprint for further study and preparation for the project.
5. Although this course has been adjusted to Chinese in this semester, some materials are prepared in English. Expect students to become familiar with English and prepare for being a global village citizen. However, teaching English is not the main purpose of this course. Try to speak and write in English for exploiting the opportunity. If you confront some tough challenges in language, I have sufficient patience to welcome your growth and breakthrough.
6. This is the draft syllabus. According to the interaction between you and me, the syllabus could be adjusted to cater for suitable learning pace and environment.
7. Keep "Be all you can be" in your mind and enjoy this course.

Reference books:

1. Shaw, J. K., Strategic Management in Telecommunications, Artech House Telecommunications Library, Feb ,2000. ISBN: 1580530184 (it will be reserved in NCKU main library)
2. Strouse, K.G., Strategies for Success in the New Telecommunications Marketplace, Artech House Telecommunications Library, Jan ,2001. ISBN: 1580531423 (also will be reserved in NCKU main library)
3. Litman, B.R., The Motion Picture Mega-Industry, Allyn and Bacon, Feb, 1998. ISBN: 0205200265
4. Brandenburger, A. M. & Nalebuff, B, J., Co-opetition, A revolutionary mindset that combines competition and cooperation, Broadway Business, Dec,1999 ISBN: 0385479506
5. Friedman, T.L., The World is Flat 3.0: A Brief History of the Twenty-First Century, Farrar, Straus, and Giroux, Jan, 2006 ISBN: B0012WXAAM
6. Owen. B., & Wildman. S., Video Economics, Harvard University Press, April 1992, ISBN: 0674973163