

National Tsing Hua University
College of Technology Management
Course Syllabus

科號 Course Number	11220QF 527300	學分 Credit	3	人數限制 Size of Limit	12
中文名稱 Course Title	財務與科技管理學術研究研討				
英文名稱 Course English Title	Seminar on Research and Academic Publication in Finance and Technology Management				
任課教師 Instructor	Po-Hsuan Hsu				
教師聯絡方式 Contact Information	pohsuanhsu@mx.nthu.edu.tw				
助教 Teaching Assistant	楊婕妤				
助教聯絡方式 Teaching Assistant Contact	yangjy.julie@gmail.com				
上課時間 Time	R6R7R8	上課教室 Room	735		
先修科目 Prerequisite(s)	N/A				

本課程對應之學習目標與核心能力 Aligned Learning Goals and Learning Objectives:
0%, 0%, 40%, 30%, 30%

此科目對應之系所課程規畫所欲培養之核心能力 Core capability to be cultivated by this course	權重 (百分比) Percentage
以堅實理論為基礎，理解財金體系運作機制，應用財金分析技術，實際解決財金問題。 To understand the mechanism of the finance system through solid theoretical foundation and to apply quantitative financial analysis to solve real-world financial issues.	0%
具備厚實財金基礎知識，包括財務管理與公司理財、衍生性商品訂價與風險管理 To learn the knowledge of financial management, corporate finance, financial derivatives, and risk management.	0%
具備創新管理，開發新領域的能力 To acquire the ability to innovate, integrate, and develop new research areas.	40%
培養跨領域工作的能力 To develop the ability to work across different disciplines.	30%
具備團隊合作的精神，有效溝通的能力，以及人文素養與國際觀。 To develop teamwork spirit, to acquire the ability to communicate effectively, and to have broad knowledge across humanities, social science and natural science with international perspective.	30%

課程目標 Course Objectives

- Both finance and technology management are important research areas in College of Technology Management, National Tsing Hua University. The interaction

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between researchers from these two areas is of great potential but appears lacking at this stage. As a researcher who published in both finance and technology management journals (<https://oir.site.nthu.edu.tw/p/412-1487-18850.php>), I plan to design a course that can bridge research topics in both areas and help faculty members/students know how to do research in both areas.

2. Provide an overview of the possible link between finance and technology management.
3. Discuss some important, on-going research topics in finance and technology management.
4. Coach students/faculty members on research topic choices, coauthor networks, project portfolios, and submissions as well as publications.
5. Prepare students/faculty members for various difficulties in data collection, empirical designs, write-up, submission, circulation, and revision.
6. Help students/faculty members avoid common mistakes in research, write-up, submission, and revisions.

課程說明 Course Description

1. Videotaping or recording is not allowed as they will make me uncomfortable. In addition, the lecture is my intellectual property so it should not be videotaped or recorded. Lastly, I do not want to be quoted outside classroom. Students can ONLY use pen and paper to make notes if they want.
2. This course is prepared for students who plan to pursue Ph.D. study or who are Ph.D. students, and faculty members who are interested in research in finance and/or technology management.
3. The format of the course will be guided group forums/discussions. I will organize the discussion topics, share my experiences, lead the discussions, and respond to questions.
4. I will/may give "clinic time" on occasion. That is, students or faculty members can use the lecture time to present their works to receive comments from me and other classmates or to discuss their projects with me.
5. This course will be taught in English.
6. Students will need to use English in their presentations and/or reports.
7. Students will need to attend "Taiwan Symposium on Innovation Economics and Entrepreneurship" and write reports on presented papers – more details will be provided in "Grading" and "Course Schedule"

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8. Students will have to make final presentations on their research
 - Every lecture will contain one each of the following categories: one big-picture/philosophical issue, one middle-level issue, and one technical issue
 - A sample list of mid-level issues:
 1. Research career planning and time management
 2. The research environment in Taiwan/overseas opportunities/life-work balance
 3. Know your preference/capability/limitation, strengthen/weakness, and time management
 4. The choice of research directions/topics
 - A sample list of technical issues:
 5. How to get good research ideas?
 6. How to find the right coauthors and how to form a team
 7. How to start the write-up of your papers
 8. Common mistakes for PhD students and young researchers
 - A sample list of weekly teaching schedule (and my related papers)
 1. How to find topics that may interest both finance and technology management audience?
 - “Rich on paper? Chinese firms’ academic publications, patents, and market values,” with David Hsu and Qifeng Zhao, *Research Policy*, 50(9), 104319, 2021
 - “Benchmarking U.S. university patent value and commercialization efforts: A new approach,” with David Hsu, Tong Zhou, and Arvids Ziedonis, *Research Policy*, 50(1), 104076, 2021
 - “The Oscar goes to...: High-tech firms’ acquisitions in response to rivals’ technology breakthroughs,” with I-Ju Chen, Micah Officer, and Yanzhi Wang, *Research Policy*, 49(7), 104078, 2020
 2. The real effects of policies and regulations
 - “The real effect of smoking bans: Evidence from corporate innovation,” with Huasheng Gao, Kai Li, and Jin Zhang, *Journal of Financial and Quantitative Analysis*, 55(2), 387-427, 2020
 - “Innovation strategy of private firms,” with Huasheng Gao and Kai Li, *Journal of Financial and Quantitative Analysis*, 53 (1), 1-32, 2018
 - “More cash, less innovation: The effect of the American Jobs Creation Act on patent value,” with Heitor Almeida, Dongmei Li, and Kevin Tseng, *Journal of Financial and Quantitative Analysis*, 56(1), 1-28, 2021
 3. (Why) do we need models/theoretical framework in our papers?
 - “Technological innovations and aggregate risk premiums,” *Journal of Financial Economics*, 94 (2), 264-279, 2009
 - “Patent thickets, stock returns, and conditional CAPM,” with Hsiao-Hui Lee

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and Tong Zhou, Management Science, forthcoming, 2021

- “Leviathan Inc. and corporate environmental engagement,” with Hao Liang and Pedro Matos, Management Science, forthcoming, 2021
- “Innovative originality, profitability, and stock returns,” with David Hirshleifer and Dongmei Li, Review of Financial Studies, 31(7), 2553-2605, 2018
- “Natural disasters, technology diversity, and operating performance,” with Hsiao-Hui Lee, Shu-Cing Peng, and Long Yi, Review of Economics and Statistics, 100(4), 619-630, 2018
- “What affects innovation more: Policy or policy uncertainty?” with Utpal Bhattacharya, Xuan Tian, and Yan Xu, Journal of Financial and Quantitative Analysis, 52 (5), 1869-1901, 2017

4. How to address endogeneity concerns

- “Financial development and innovation: Cross-country evidence,” with Xuan Tian and Yan Xu, Journal of Financial Economics, 112 (1), 116-135, 2014
- “The real effects of real earnings management: Evidence from innovation,” with Frederick Bereskin and Wendy Rotenberg, Contemporary Accounting Research, 35 (1), 525-557, 2018
- “The real effect of smoking bans: Evidence from corporate innovation,” with Huasheng Gao, Kai Li, and Jin Zhang, Journal of Financial and Quantitative Analysis, 55(2), 387-427, 2020
- “Consolidating product lines via mergers and acquisitions: Evidence from the USPTO trademark data,” with Kai Li, Xing Liu, and Hong Wu, Journal of Financial and Quantitative Analysis, forthcoming, 2021

5. The use of micro-data in finance and technology management

- “Rich on paper? Chinese firms' academic publications, patents, and market values,” with David Hsu and Qifeng Zhao, Research Policy, 50(9), 104319, 2021
- “Benchmarking U.S. university patent value and commercialization efforts: A new approach,” with David Hsu, Tong Zhou, and Arvids Ziedonis, Research Policy, 50(1), 104076, 2021
- “The real effect of smoking bans: Evidence from corporate innovation,” with Huasheng Gao, Kai Li, and Jin Zhang, Journal of Financial and Quantitative Analysis, 55(2), 387-427, 2020

指定用書 Textbooks

No textbook

參考書籍 References

The references will be provided in the lecture

教學方式 Teaching Approach

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1. Lectures
2. Group discussions
3. Guest speaker presentations (Symposium)

評分標準 Grading

1. Attendance, course participation and discussion: 10%
2. Reports on symposium/conference presentations (4 times): 40%
3. Final presentation: 50%

教學進度 Course Schedule

Since Prof. Hsu will host **4 research symposiums (all online:**

<https://oir.site.nthu.edu.tw/p/404-1487-164855.php>) in this semester,

1. John Walsh (Georgia Tech) online on Feb. 25, 2022
2. Daniel Spulber (Northwestern U.) online on March 25, 2022
3. Henry Sauermann (ESMT) online on April 22, 2022
4. Ben Martin (U. of Sussex) online on May 20, 2022

Each symposium runs from 9am to 4pm (7-hour long) will be counted as guest lectures. Students are required to attend all symposiums and send in 1 report for one presentation in each symposium (so total 4 reports).

In special occasion, the instructor will give online lecture instead of in-person meeting (it is important for us to learn online teaching and learning for the decades to come)

There will be no lecture on March 10, April 7, May 5, and June 2.

Tentative weekly schedules:

- Feb. 17
- Feb. 24
- March. 3
- March 10 **no lecture**
- March 17
- March 24
- March 31
- April 7 **no lecture**
- April 14
- April 21

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- April 28
- May 5 **no lecture**
- May 12
- May 19
- May 26
- June 2 **no lecture**
- June 9: final presentations
- June 16: final presentations

課程相關連接 Course Related Links

N/A