Department of Industrial and Information Management-Graduate Program Institute of Information Management

R353800 Strategic Management of Technology and Innovation (科技與創新策略管理)

Spring 2018 (106 學年度第 2 學期)

Instructor: Hsieh, Pei-Hsuan Office Hours: By appointment Email: peihsuan@mail.ncku.edu.tw Phone: 06-275-7575 #53121

Class Time & Location: Monday 1-3, IIM 61204

Prerequisite: n/a



Course Description:

This course will explore technology and innovation related topics in the field of management. An e-commerce activity will be held for groups assigned among students. The students are then expected to be creative and reflective to explore potential good practices by implementing the innovative ideas produced by the students. They also need to carefully describe how technologies can be developed and then integrated in the e-commerce activity, local areas, or even for the global village. In addition, students are expected to analyze as well as predict the future market needs for different industries after acquiring the concepts of knowledge management, property management and technical transfer.

Course Objectives:

- Students are able to comprehend the concepts of SMTI.
- Students are able to pose critical questions through individual reflection.
- Students are able to analyze case studies in group discussion sessions.

Course Content: (Micro-Credit Learning Available!) (微學分學習適用)

- 1. Feb 26 Introduction (strategic management, technological innovation)
- 2. Mar 05 Intro. + Strategy and the management of T and I
- 3. Mar 12 KM and diverse system applications
- 4. Mar 19 Innovation management (planning)
- 5. Mar 26 Innovation management (implementation)
- 6. Apr 02 Spring Break ~ NO CLASS but a special event will be provided.
- 7. Apr 09 Innovation management (evaluation and control) case discussion (group 1/6)
- 8. Apr 16 New Services in IT (Ind. Presentation 1/3)
- 9. Apr 23 Social Entrepreneurship 1/4 case discussion (group 2/6)
- 10. Apr 30 Technology management (planning)
- 11. May 07 Technology management (implementation)
- 12. May 14 Technology management (evaluation and control) case discussion (group 3/6)
- 13. May 21 New IT in Services (Ind. Presentation 2/3)
- 14. May 28 Social Entrepreneurship 2/4 case discussion (group 4/6)
- 15. June 04 Social Entrepreneurship 3/4 case discussion (group 5/6)
- 16. June 11 Social Entrepreneurship 4/4 case discussion (**group 6/6**)
- 17. June 18 Mid-Autumn Festival! NO CLASS but a special event will be provided.
- 18. June 25 Learning reflection (Ind. Presentation 3/3)

Textbooks:

White, M. A., & Bruton, G. D. (2011). *The management of technology and innovation: A strategic approach* (2nd ed.). Mason, OH: Thomson Higher Education.

Schilling, M. A. (2012). *Strategic management of technological innovation* (4th ed.). New York: McGraw-Hill/Irwin.

References:

- Andersson, T., Curley, M. G., & Formica, P. (2010). Knowledge-driven entrepreneurship: The key to social and economic transformation. New York, NY: Springer Science+Business Media, LLC. http://dx.doi.org/10.1007/978-1-4419-1188-9
- Betz, F. (2011). *Managing technological innovation: Competitive advantage from change* (3rd ed.). NJ: Wiley-Interscience.
- Brem, A., & Viardo, E. (2013). Evolution of innovation management: Trends in an international context. Houndmills, Basingstoke, Hampshire: Palgrave Macmillan. http://www.palgraveconnect.com/doifinder/10.1057/9781137299994
- Coda, V. (2010). Entrepreneurial values and strategic management: Essays in management theory. Houndmills, Basingstoke, Hampshire, New York: Palgrave Macmillan, 2010. http://www.palgraveconnect.com/doifinder/10.1057/9780230299054
- Fichter, K., & Beucker, S. (2012). Innovation communities: Teamworking of key persons a success factor in radical innovation. Berlin, Heidelberg: Springer Berlin Heidelberg. http://dx.doi.org/10.1007/978-3-642-22128-6
- Gunasekaran, A., Khalil, O., & Rahman, S. M. (2003). Knowledge and information technology management: human and social perspectives (eds.). Hershey, Pa.: IGI Global. http://services.igi-global.com/resolvedoi/resolve.aspx?doi=10.4018/978-1-59140-032-5
- MacGregor, S. P., & Carleton, T. (2012). Sustaining innovation: collaboration models for a complex world. New York, NY: Springer Science+Business Media, LLC. http://dx.doi.org/10.1007/978-1-4614-2077-4
- Putnik, G. D., & Cunha, M. M. (2007). Knowledge and technology management in virtual organizations: issues, trends, opportunities and solutions (eds.). Hershey, PA: Idea Group Pub. http://www.myilibrary.com?id=73848
- Tidd, J., & Bessant, J. (2013). *Managing innovation* (5th ed.). England: John Wiley & Sons Ltd. http://www.innovation-portal.info/



http://aacsb.management.ncku.edu.tw/

Grading Policy:

- A 30% Ind. Presentation (3 times, each 10%)
- B 20% FB entries (both technology- and service-oriented management)
- C 30% Group discussion (case studies; 6 times, each 5%)
- E 20% Peer-review report (crowd funding proposal)

(*Including a grading scheme for AACSB Multiple Assessment:)

| | | A | В | C | D |
|-------|--|-----|-----|-----|-----|
| | | 30% | 20% | 30% | 20% |
| COMMU | ☑ Speaking | 20% | | 20% | |
| | ☑ Writing | 20% | 30% | | 40% |
| CPSI | ☑ Critical Thinking/ Innovation | 20% | 20% | 20% | 20% |
| | ☑ Interdiscip. Competence/ Prob. Solving | 20% | 10% | 20% | 20% |
| LEAD | ☑ Leadership | | 10% | 10% | |
| | ☐ Ethical Reasoning | | | | |
| GLOB | ☑ Global Vision | 20% | 20% | 20% | 20% |
| VSP | ☑ Teamwork | | 10% | 10% | |