
COURSE SYLLABUS

Course Information

Course Title: Social Network Theory
Course Number: OB 7312-001
Class Location: SOM 2.717
Class Time: 10:30 AM – 1:15 PM, Fridays

Instructor Contact Information

Name: Zhiang (John) LIN
Office Location: SOM 4.405
Office Hours: Before and after class, or by appointment
Phone: 972-883-2753
Fax: 972-883-6029
E-mail: zlin@utdallas.edu
Homepage: <http://www.utdallas.edu/~zlin>

Teaching Assistant Contact Information

Name: David H. Weng
Office Location: SOM 4.102
Office Phone: 972-883-6112
Fax: 972-883-6029
E-mail: dweng@utdallas.edu

The teaching assistant will mainly be responsible for: 1) providing a bridge between the instructor and the class, 2) copying some reading articles, 3) helping with software demos and other technical matters; and 4) distributing teaching evaluation forms.

Course Pre-requisites, Co-requisites, and/or Other Restrictions

Pre-requisites: Enrollment in the OSIM Ph.D. program or permission of instructor

Course Description

Social network theory, as one of the fastest growing paradigms originated from anthropology and sociology, has gained enormous popularity within the broad field of organizational management. Yet, misconceptions have been frequent with regard to its true nature and applicability. This Ph.D. level course intends to provide a systematic introduction to social network theory by reviewing its basic history, philosophy, theories, and methodologies. We will also explore how social network theory can be applied to addressing various management issues such as knowledge diffusion, social capital, strategic alliance, and network dynamics.

Student Learning Objectives/Outcomes

At the end of the course, students should

- 1) have a solid understanding of the main concepts and development in the field of social network theory;
 - 2) be able to use some important network software packages such as UciNet;
 - 3) be able to apply network theories and concepts to address some important organizational issues; and
 - 4) be able to develop a solid term paper and publishable research project.
-

Required Textbooks and Materials

Textbook:

- Network Analysis by D. Knoke and J. Kuklinski. Published by Sage in 1982. Available at UTD Bookstore, Off Campus Bookstore, or Amazon.com.

Reading Packet for Social Network Theory:

- Available with the TA and may be copied at AlphaGraphics, 955 E. Campbell Rd., #600, Richardson, TX 75081. Phone: 972-234-3033.

Network Analysis Software UciNet 6:

- Available at: <http://www.analytictech.com/downloaduc6.htm>. Student discount is provided there. Please also obtain a hard copy of the manual.
-

Grading Policies

This course requires extensive readings, active discussions, and intelligent research work. According to the university policy, beginning from Fall 2008, the final grading scale for graduate coursework has become: A, A-, B+, B, B-, C+, C, F, and I (incomplete). For our course, a student's final grade will be based on a weighted average grade of the following three components (weekly participation, term paper, and presentation of term paper). The individual grade for each of the three components will be similar to that of the final grade, with the exception that it will include an additional grade of A+ for exceptional work.

1. Weekly Participation (30%)

Students are expected to come to class being prepared for and actively involved in discussing all the readings assigned from the syllabus. For each weekly assigned article, one or two students will serve as main discussion leaders. Each discussion leader, individually, should also submit to the instructor a two page review containing his/her findings, critiques, extensions, and applications of the ideas and methods from the article. The quality of each student's discussion will be evaluated in the following questions:

- Does the student demonstrate a basic understanding of the assigned reading materials?
- Can the student identify the common themes in the readings and use these themes to integrate and compare the articles?
- Does the student use the readings as a base to develop new ideas or insights for potential new projects?
- Can the student formulate appropriate critiques of the readings and defend his/her position in discussion with other class members?

A student's weekly participation credit may be reduced if he/she misses portions of the class.

2. Term Paper (60%)

Near the end of the semester, each student is required to submit a written term paper on an important organizational issue using appropriate social network theories and methods. The term paper should have all the main components (and at least a pilot network data set) of a research paper, as well as the potential to be published in a respected management journal, perhaps with some further additions or improvement. The preparation of the manuscript should follow the *Style Guide for Authors* in the Academy of Management Journal. The grading of the paper will be based on the following criteria:

- Contribution of the topic to the field;
- Thoroughness and relevance of the literature review;
- Development of the theoretical framework (including hypotheses);
- Soundness and feasibility in research design (including data sources, variable measures, and analytical methods);
- Thoughtfulness in result analyses and interpretations;
- Insights in discussions (including finding implications, boundary conditions, and future directions); and
- Coherence, clarity, and professionalism of the writing.

On *March 12, 2010*, each student should submit a 2-3 page proposal, briefly describing a) the research question, b) the potential contributions, c) the theoretical framework, with some representative hypotheses, and d) the research methodology, including the data sources and main variables for testing the hypotheses. Each student will share his/her proposal with the class to obtain some general feedback with regard to the potential significance, applicability, coherence, and feasibility of the paper. Students will then work on their own to complete the papers. The deadline for the term paper is **3:00 PM on April 23, 2010**, at the instructor's office.

As a useful advice, it will greatly help the success of the term paper if the student can adopt a proactive, structured, and disciplined approach and divide the project into manageable sub-steps.

3. Presentation of Term Paper (10%)

In the last class of the semester, each student will also present his or her paper to the whole class in about fifteen minutes with some additional time for questions. The quality of the presentation will be based on the following criteria:

- Attractiveness and preparedness of the talk;
- Clarity of the speech;
- Handling of the questions; and
- Management of the allowed time.

Course & Instructor Policies

1. Final Grade Checking

There will be a designated office hour (9:00-10:00 AM, May 3, 2010) for final grade checking in the instructor's office. Students can use that time to pick up their graded term paper along with comments and a final grade, and discuss their plan for improving and publishing the term paper.

In compliance with the university's policy on confidentiality, no grade information will be transmitted via phone or e-mail.

2. Class Policies

Throughout the semester, each student is expected to be on time for the class and follow the university's guideline on student conduct with regard to plagiarism and other dishonorable behaviors.

Students should also keep in mind that anything discussed in the classroom should be kept in context and not relayed to other faculty members or students as this may cause sensitive reactions due to misinterpretations, whether intentionally or unintentionally.

Assignments & Academic Calendar

Class 1. January 15, 2010 Course Descriptions; UciNet Demonstrations

◆ **Part 1. History and Philosophy**

Class 2. January 22, 2010 History and Introduction; Data Source Discussions

1. Milgram, S. 1967. The small world problem. Psychology Today, 1: 61-67.
2. Buchanan, M. 2002. Chapters 1-3. Nexus: Small worlds and the groundbreaking science of networks. New York, NY: W.W. Norton and Co.
3. Knoke, D. and Kuklinski, J. 1982. Network analysis. Beverly Hills, CA: Sage.
4. Bott, E. 1955. Urban families: Conjugal roles and social networks. Human Relations, 8: 345-383.

Class 3. January 29, 2010 Philosophy and Challenges

5. Wellman, B. 1988. Structural analysis: From method and metaphor to theory and substance. In B. Wellman and S. Berkowitz (Eds.) Social Structures: A network approach, p.477-497. Cambridge University Press.
6. Mayhew, B. 1980. Structuralism vs. individualism: Part 1, shadow boxing in the dark. Social Forces, 59(3): 335-375.
7. Salancik, G.R. 1995. Wanted: A good network theory of organization. Administrative Science Quarterly, 40: 345-349.
8. Galaskiewicz, J. 2007. Editorial: Has a network theory of organizational behavior lived up to its promises? Management and Organization Review, 3: 1-18.

◆ **Part 2. Terminology and Methodology**

Class 4. February 5, 2010 Strength of Ties

9. Granovetter, M. 1972. The strength of weak ties. American Journal of Sociology, 78: 1360-1380. Reprinted in Leinhardt' Social networks: A developing paradigm.
10. Granovetter, M. 1983. The strength of weak ties: A network theory revisited. In P. Marsden and N. Lin (Eds.) Social structure and network analysis. Thousand Oaks, CA: Sage.
11. Nelson, R.E. 1989. The strength of strong ties: Social networks and intergroup conflict in organizations. Academy of Management Journal, 32(2): 377-401.
12. Hansen, M.T. 1999. The search-transfer problem: The role of weak ties in sharing knowledge across organization sub-units. Administrative Science Quarterly, 44(1): 82-111.

Class 5. February 12, 2010 Centrality; UciNet Demonstrations

13. Freeman, L.C. 1978/79. Centrality in social networks: Conceptual clarification. Social Networks, 215-239.
14. Brass, D. 1984. Being in the right place: A structural analysis of individual influences in an organization. Administrative Science Quarterly, 29: 518-539.
15. Krackhardt, D. 1990. Assessing the political landscape: Structure, cognition and power in organizations. Administrative Science Quarterly, 35: 342-369.
16. Lin, Z., Yang, H., and Arya, B. 2009. Alliance partners and firm performance: Resource complementarity and status association. Strategic Management Journal, 30(9): 921-940.

Class 6. February 19, 2010 Structural Holes; Data Source Discussions

17. Burt, R.S. 2004. Structural holes and good ideas. American Journal of Sociology, 110(2): 349-399.
18. Ahuja, G. 2000. Collaboration networks, structural holes, and innovation: A longitudinal study. Administrative Science Quarterly, 45: 425-455.
19. Xiao, Z.X. and Tsui, A.S. 2007. Where brokers do not work: The cultural contingency of social capital in Chinese high-tech firms. Administrative Science Quarterly, 52(1): 1-31.
20. Lin, Z., Peng, M.W., Yang, H., and Sun, L. 2009. How do networks and learning drive M&As? An Institutional Comparison between China and the United States. Strategic Management Journal, 30(10): 1113-1132.

Class 7. February 26, 2010 Role Analysis and Block Modeling

21. Borgatti, S.P. and Everett, M.G. 1992. Notions of positions in social network analysis. Sociological Methodology, 22: 1-35.
22. Krackhardt, D. and Porter, L. 1986. The snowball effect: Turnover embedded in communication networks. Journal of Applied Psychology, 71: 50-56.

23. Breiger, R.L. 1976. Career attributes and network structure: A blockmodel study of a biomedical research specialty. American Sociological Review, 41: 117-135.
24. Gerlach, M.L. 1992. The Japanese corporate network: A blockmodel analysis. Administrative Science Quarterly, 37: 105-139.

Class 8. March 5, 2010 Embeddedness

25. Granovetter, M. 1985. Economic action and social structure: The problem of embeddedness. American Journal of Sociology, 91(3): 481-510.
26. Dacin, M.T., Ventresca, M.J., and Beal, B.D. 1999. The embeddedness of organizations: Dialogue and Directions. Journal of Management, 25(3): 317-356.
27. Gulati, R. and Gargiulo, M. 1999. Where do interorganizational networks come from? American Journal of Sociology, 104(5): 1439-1493.
28. Lin, Z., Yang, H., and Chen, H. 2009. Economic and symbolic implications of successor outsidership: Relational, institutional, and environmental influences. Under review at Strategic Management Journal.

◆ **Part 3. Applications to Organizational Issues**

Class 9. March 12, 2010 Knowledge Transfer; Proposal Submissions and Discussions

29. Burt, R. 1987. Social contagion and innovation: Cohesion versus structural equivalence. American Journal of Sociology, 92: 1287-1335.
30. Abrahamson, E. and Rosenkopf, L. 1997. Social network effects on the extent of innovation diffusion: A computer simulation. Organization Science, 8(3): 289-309.
31. Reagans, R. and McEvily, B. 2003. Network structure and knowledge transfer: The effects of cohesion and range. Administrative Science Quarterly, 48: 240-267.
32. Arya, B. and Lin, Z. 2007. Understanding collaboration outcomes from an extended RBV perspective: The roles of organizational characteristics, partner attributes, and network structures. Journal of Management, 33(5): 697-723.

No Class. March 19, 2010 Spring Break

Class 10. March 26, 2010 Social Capital

33. Lin, N., Ensel, W.M., and Vaughn, J.C. 1981. Social resources and strength of ties: Structural factors in occupational status attainment. American Sociological Review, 46: 393-405.
34. Gargiulo, M and Benassi, M. 2000. Trapped in your own net? Network cohesion, structural holes,

and the adaptation of social capital. Organization Science, 11(2): 183-196.

35. Zaheer A. and Bell, G.G. 2005. Benefiting from network position: Firm capabilities, structural holes, and performance. Strategic Management Journal, 26: 809-825.
36. Li, L., Lin, Z., and Arya, B. 2008. The turtle-hare story revisited: Social capital and resource accumulation for firms from emerging economies. Asia Pacific Journal of Management, 25(2): 251-275.

Class 11. April 2, 2010 Interfirm Governance

37. Powell, W.W. 1990. Neither markets nor hierarchy: Network forms of organization. Research in Organizational Behavior, 12: 295-336.
38. Oliver, C. 1990. Determinant of interorganizational relationships: Integration and future directions. Academy of Management Review, 15(2): 241-265.
39. Sturt, T. E. 1998. Network positions and propensities to collaborate: An investigation of strategic alliance formation in a high-technology industry. Administrative Science Quarterly, 43: 668-698.
40. Yang, H., Lin, Z. and Lin, Y. 2010. A multi-level framework of firm boundaries: Firm characteristics, dyadic differences, and network attributes. Strategic Management Journal, 31(3): In press.

Class 12. April 9, 2010 Bridging Individual and Structural Perspectives

41. Krackhardt, D. and Porter, L. W. 1985. When friends leave: A structural analysis of the relationship between turnover and stayers' attitudes. Administrative Science Quarterly, 30: 242-261.
42. Kilduff, M. and Krackhardt, D. 1994. Bringing the individual back in: A structural analysis of the internal market for reputation in organizations. Academy of Management Journal, 37: 87-108.
43. Mehra, A., Kilduff, M., and Brass, D. J. 2001. The social networks of high and low self-monitors: Implications for workplace performance. Administrative Science Quarterly, 46: 121-146.
44. Lin, Z., Yang, H., Arya, B., Zhi, H., and Li, D. 2005. Structural vs. individual perspectives on the dynamics of group performance: Theoretical exploration and empirical investigation. Journal of Management, 31(3): 354-380.

Class 13. April 16, 2010 Network Dynamics

45. Doreian, P. and Stokman, F.N. 1997. The dynamics and evolution of social networks. In P. Doreian and F. Stokman (Eds.) Evolution of Social Networks. London, UK: Gordon & Breach Publishing Group.
46. Doz, Y. L. 1996. The evolution of cooperation in strategic alliances: Initial conditions or learning processes? Strategic Management Journal, 17: 55-83.

47. Human, S.E. and Provan, K.G. 2000. Legitimacy building in the evolution of small-firm multilateral networks: A comparative study of success and demise. Administrative Science Quarterly, 45: 327-365.
48. Lin, Z., Yang, H., and Demirkan, I. 2007. The performance consequences of ambidexterity in strategic alliance formations: Empirical investigation and computational theorizing. Management Science, 53(10): 1645-1658.

<i>Class 14.</i>	<i>April 23, 2010</i>	<i>Self Study; Term Paper Due at Instructor's Office</i>
<i>Class 15.</i>	<i>April 30, 2010</i>	<i>Term Paper Presentations</i>
	<i>May 3, 2010</i>	<i>Term Paper and Grade Pick-up; Discussion of Future Plans; 9:00 -11:00 AM at the instructor's office</i>

VARIOUS UNIVERSITY POLICIES

Field Trip Policies, Off-campus Instruction and Course Activities

Off-campus, out-of-state, and foreign instruction and activities are subject to state law and University policies and procedures regarding travel and risk-related activities. Information regarding these rules and regulations may be found at the website address http://www.utdallas.edu/BusinessAffairs/Travel_Risk_Activities.htm. Additional information is available from the office of the school dean. Below is a description of any travel and/or risk-related activity associated with this course.

Student Conduct & Discipline

The University of Texas System and The University of Texas at Dallas have rules and regulations for the orderly and efficient conduct of their business. It is the responsibility of each student and each student organization to be knowledgeable about the rules and regulations which govern student conduct and activities. General information on student conduct and discipline is contained in the UTD publication, *A to Z Guide*, which is provided to all registered students each academic year.

The University of Texas at Dallas administers student discipline within the procedures of recognized and established due process. Procedures are defined and described in the *Rules and Regulations, Board of Regents, The University of Texas System, Part 1, Chapter VI, Section 3*, and in Title V, Rules on Student Services and Activities of the university's *Handbook of Operating Procedures*. Copies of these rules and regulations are available to students in the Office of the Dean of Students, where staff members are available to assist students in interpreting the rules and regulations (SU 1.602, 972/883-6391).

A student at the university neither loses the rights nor escapes the responsibilities of citizenship. He or she is expected to obey federal, state, and local laws as well as the Regents' Rules, university regulations, and administrative rules. Students are subject to discipline for violating the standards of conduct whether such conduct takes place on or off campus, or whether civil or criminal penalties are also imposed for such conduct.

Academic Integrity

The faculty expects from its students a high level of responsibility and academic honesty. Because the value of an academic degree depends upon the absolute integrity of the work done by the student for that degree, it is imperative that a student demonstrate a high standard of individual honor in his or her scholastic work.

Scholastic dishonesty includes, but is not limited to, statements, acts or omissions related to applications for enrollment or the award of a degree, and/or the submission as one's own work or material that is not one's own. As a general rule, scholastic dishonesty involves one of the following acts: cheating, plagiarism, collusion and/or falsifying academic records. Students suspected of academic dishonesty are subject to disciplinary proceedings.

Plagiarism, especially from the web, from portions of papers for other classes, and from any other source is unacceptable and will be dealt with under the university's policy on plagiarism (see general catalog for details). This course will use the resources of turnitin.com, which searches the web for possible plagiarism and is over 90% effective.

Email Use

The University of Texas at Dallas recognizes the value and efficiency of communication between faculty/staff and students through electronic mail. At the same time, email raises some issues concerning security and the identity of each individual in an email exchange. The university encourages all official student email correspondence be sent only to a student's U.T. Dallas email address and that faculty and staff consider email from students official only if it originates from a UTD student account. This allows the university to maintain a high degree of confidence in the identity of all individual corresponding and the security of the transmitted information. UTD furnishes each student with a free email account that is to be used in all communication with university personnel. The Department of

Information Resources at U.T. Dallas provides a method for students to have their U.T. Dallas mail forwarded to other accounts.

Withdrawal from Class

The administration of this institution has set deadlines for withdrawal of any college-level courses. These dates and times are published in that semester's course catalog. Administration procedures must be followed. It is the student's responsibility to handle withdrawal requirements from any class. In other words, I cannot drop or withdraw any student. You must do the proper paperwork to ensure that you will not receive a final grade of "F" in a course if you choose not to attend the class once you are enrolled.

Student Grievance Procedures

Procedures for student grievances are found in Title V, Rules on Student Services and Activities, of the university's *Handbook of Operating Procedures*.

In attempting to resolve any student grievance regarding grades, evaluations, or other fulfillments of academic responsibility, it is the obligation of the student first to make a serious effort to resolve the matter with the instructor, supervisor, administrator, or committee with whom the grievance originates (hereafter called "the respondent"). Individual faculty members retain primary responsibility for assigning grades and evaluations. If the matter cannot be resolved at that level, the grievance must be submitted in writing to the respondent with a copy of the respondent's School Dean. If the matter is not resolved by the written response provided by the respondent, the student may submit a written appeal to the School Dean. If the grievance is not resolved by the School Dean's decision, the student may make a written appeal to the Dean of Graduate or Undergraduate Education, and the dean will appoint and convene an Academic Appeals Panel. The decision of the Academic Appeals Panel is final. The results of the academic appeals process will be distributed to all involved parties.

Copies of these rules and regulations are available to students in the Office of the Dean of Students, where staff members are available to assist students in interpreting the rules and regulations.

Incomplete Grade Policy

As per university policy, incomplete grades will be granted only for work unavoidably missed at the semester's end and only if 70% of the course work has been completed. An incomplete grade must be resolved within eight (8) weeks from the first day of the subsequent long semester. If the required work to complete the course and to remove the incomplete grade is not submitted by the specified deadline, the incomplete grade is changed automatically to a grade of **F**.

Disability Services

The goal of Disability Services is to provide students with disabilities educational opportunities equal to those of their non-disabled peers. Disability Services is located in room 1.610 in the Student Union. Office hours are Monday and Thursday, 8:30 a.m. to 6:30 p.m.; Tuesday and Wednesday, 8:30 a.m. to 7:30 p.m.; and Friday, 8:30 a.m. to 5:30 p.m.

The contact information for the Office of Disability Services is:
The University of Texas at Dallas, SU 22
PO Box 830688
Richardson, Texas 75083-0688
(972) 883-2098 (voice or TTY)

Essentially, the law requires that colleges and universities make those reasonable adjustments necessary to eliminate discrimination on the basis of disability. For example, it may be necessary to remove classroom prohibitions against tape recorders or animals (in the case of dog guides) for students who are blind. Occasionally an assignment requirement may be substituted (for example, a research paper versus an oral presentation for a student who is hearing impaired). Classes enrolled students with mobility impairments may have to be rescheduled in accessible facilities. The college or university may need to provide special services such as registration, note-taking, or mobility assistance.

It is the student's responsibility to notify his or her professors of the need for such an accommodation. Disability Services provides students with letters to present to faculty members to verify that the student has a disability and needs accommodations. Individuals requiring special accommodation should contact the professor after class or during office hours.

Religious Holy Days

The University of Texas at Dallas will excuse a student from class or other required activities for the travel to and observance of a religious holy day for a religion whose places of worship are exempt from property tax under Section 11.20, Tax Code, Texas Code Annotated.

The student is encouraged to notify the instructor or activity sponsor as soon as possible regarding the absence, preferably in advance of the assignment. The student, so excused, will be allowed to take the exam or complete the assignment within a reasonable time after the absence: a period equal to the length of the absence, up to a maximum of one week. A student who notifies the instructor and completes any missed exam or assignment may not be penalized for the absence. A student who fails to complete the exam or assignment within the prescribed period may receive a failing grade for that exam or assignment.

If a student or an instructor disagrees about the nature of the absence [i.e., for the purpose of observing a religious holy day] or if there is similar disagreement about whether the student has been given a reasonable time to complete any missed assignments or examinations, either the student or the instructor may request a ruling from the chief executive officer of the institution, or his or her designee. The chief executive officer or designee must take into account the legislative intent of TEC 51.911(b), and the student and instructor will abide by the decision of the chief executive officer or designee.

These descriptions and timelines are subject to change at the discretion of the Professor.
