SYLLABUS

CJT 780

SPECIAL TOPICS IN COMMUNICATION:
KNOWLEDGE NETWORKS

FALL 2006

INSTRUCTOR: Dr. J. David Johnson
OFFICE HOURS: T 3-4:30 & BY APPOINTMENT (make appointments with Louise Menifee)
OFFICE: GREHAN 133
TELEPHONE: 257-7805
FAX: 859 323-9879
E-MAIL: jdj@pop.uky.edu
WEB PAGE: http://www.uky.edu/CommInfoStudies/Grad/Dean/DeansPages/deanspage.html
CLASS HOURS: Wednesday, 1-3:30
CLASS LOCATION: EGJ 223

I. COURSE OVERVIEW:

This seminar is intended to acquaint students with extant theory, methods, and computer analysis techniques related to knowledge networks.

The first unit of the course will provide students with an overview of the basics of network analysis. A major focus of this unit will be on the unique research methods and computer analytic techniques associated with network analysis. Network analysis has long been a focus of substantive research in a number of disciplines including business administration, anthropology, sociology, political science, social and developmental psychology, geography, and communication. Recently, the growing availability of sophisticated computer programs has resulted in a renewal of interest in this area. This course will especially focus on UCINET 6 (Borgatti, Everett, and Freeman, 2002, sales@analytictech.com). No prior familiarity with network analysis is required, students will be instructed in its fundamental in the course.

The second unit will focus on theories associated with knowledge networks.

The third unit of the course will focus on a variety of issues related to applications (e.g., seeking knowledge). Students will have an opportunity in this section to apply knowledge networks to specific research problems of their choosing.

II. READINGS

Readings are on reserve in Louise Menifee’s office (Grehan 133). See the assignments listed on the class schedule for more information on these readings, many of which can be easily
downloaded using the UK libraries web site.

A: TEXTS

Recommended (Followed by reading list designation):


ASSIGNMENTS: (Due dates on course schedule. More detail will be given on the nature of assignments before they are due.)

A. READING REPORTS/CRITICAL REVIEWS. For this assignment (which should be completed by October 11th) students will focus on two academic articles related to the class sessions (100 points each). The student will lead the discussion of the articles preparing an outline/key question discussion guide (one page maximum) reflecting major points related to the seminar themes to help facilitate the discussion. Students should provide me a copy of the guide by 12 noon on Monday of the week the article is to be discussed to help me in preparing for the class session. Separately on October 11 students should hand in their written critical reviews of the articles.

COMMENT ONLY ONE READING REPORT IF CLASS SIZE LARGE

B. RESEARCH ASSIGNMENT 1. This assignments will involve network analysis of a small organization and will require that students analyze its network by means of UCINET 6. (300 total points)

C. Research Paper (20-25 pages, 500 points) This paper will focus on a major network concept/variable. All papers will include the following: a conceptual definition of the variable, a rationale for its importance to the study of knowledge networks, a brief, integrative review of
research findings and/or theoretic speculation concerning the variable/concept (approximately 5 pages). The remainder of the paper will focus on an examination of your idea in a conventional research report. Data sets will be made available for students that are rich in their possibilities for secondary analysis of specific research questions. Students can also generate their own data sets. Topics for the paper will be decided in consultation with the instructor. Students must, however, use empirical data analyzed by a recognized network analysis program (e.g., see readings for listing). Examples of papers resulting from prior classes can be found in Chang & Johnson, 2001; Hartman & Johnson, 1989; Johnson, et al., 1997; and Susskind, et al., 1998.

B. PRESENTATION/PROSPECTUS (100 points) In consultation with the instructor, students should select a topic (and a paper format) by March 1 relating to the seminar themes that will be the focus of a class presentation scheduled between March 22 and April 19th. In effect this presentation will serve as prospectus for your paper that will allow you to get feedback from the class and the instructor before the paper is finalized.

IV. COURSE PROCEDURES AND POLICIES

A. Late work

Late work will not be authorized for, vacations, concerts, hangovers, mood swings, and so on. Late work will be accepted without penalty only if:

(1) authorized by instructor before the due date and/or

(2) an authorized medical or other serious excuse is provided.

If these conditions are not met, then 10% of the points for the assignment will be deducted for every school day, or fraction thereof, that it is late.

B. Doing your own work

Cheating and plagiarism are defined in Student Rights and Responsibilities in Sections 6.3.1 and 6.3.2. The minimal penalty at UK is a failure for the entire course that cannot be erased. Website for academic sanctions: http://www.uky.edu/StudentAffairs/code/UPDATE WITH NEW POLICY

C. Extra credit

No extra credit will be permitted.

D. Attendance

Students should be aware that for successful completion of the assignments regular
attendance is a must.

E. Classroom Courtesy

In all academic environments it is important that a person respect others who have come to learn. Personal conversations should not occur when the instructor or other students are presenting material. Also, you would be offended (and rightfully so) if we spent your class time reading the newspaper, answering cell phones, or engaging in other irrelevant and distracting tasks. Please accord your fellow students the same respect.

F. Accommodations

If you have a documented disability that requires academic accommodations, please see me as soon as possible during scheduled office hours. To receive accommodations in this course, you must provide me with a Letter of Accommodation from the Disability Resource Center. If you have not already done so, please register with the Disability Resource Center (Room 2, Alumni Gym, 257-2754, jkarnes@uky.edu), for coordination of campus services available to students with disabilities.
## TENTATIVE COURSE SCHEDULE

<table>
<thead>
<tr>
<th>DATE</th>
<th>TOPIC</th>
<th>ASSIGNMENT DUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>JAN  11</td>
<td>OVERVIEW, BASIC DISTINCTIONS, WHAT IS KNOWLEDGE?</td>
<td></td>
</tr>
</tbody>
</table>

### UNIT 1: BASICS

<table>
<thead>
<tr>
<th>DATE</th>
<th>TOPIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>JAN  18</td>
<td>NODES AND RELATIONSHIPS</td>
</tr>
<tr>
<td>JAN  25</td>
<td>SOFTWARE AND INDICES- COMPARING NETWORKS, EGO NETWORKS, REACHABILITY, ZONE SIZE, DENSITY</td>
</tr>
<tr>
<td>FEB  1</td>
<td>SOFTWARE AND INDICES- ROLES, CLIQUES, AND BROKERAGE</td>
</tr>
<tr>
<td>FEB  8</td>
<td>SOFTWARE AND INDICES- CENTRALITY, PROMINENCE, AUTONOMY</td>
</tr>
</tbody>
</table>

### UNIT 2: THEORY

<table>
<thead>
<tr>
<th>DATE</th>
<th>TOPIC</th>
<th>ASSIGNMENT DUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>FEB 15</td>
<td>FORMAL AND MARKET APPROACHES</td>
<td></td>
</tr>
<tr>
<td>FEB 22</td>
<td>CONTAGION AND COHESION</td>
<td>NA #1</td>
</tr>
<tr>
<td>MAR  1</td>
<td>OTHER THEORIES</td>
<td>PAPER/PRESENTATION TOPICS</td>
</tr>
</tbody>
</table>

### UNIT 3: APPLICATIONS

<table>
<thead>
<tr>
<th>DATE</th>
<th>TOPIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAR  8</td>
<td>THE DISTRIBUTION OF KNOWLEDGE</td>
</tr>
<tr>
<td>MAR 22*</td>
<td>SEEKING KNOWLEDGE</td>
</tr>
<tr>
<td>MAR  29</td>
<td>DIFFUSING KNOWLEDGE</td>
</tr>
<tr>
<td>APR  5</td>
<td>INNOVATION AND KNOWLEDGE MANAGEMENT</td>
</tr>
<tr>
<td>APR  12</td>
<td>COLLABORATION, CoPs</td>
</tr>
<tr>
<td>APR  19</td>
<td>CONFERENCES, VIRTUAL ORGANIZATIONS, MNCS,</td>
</tr>
</tbody>
</table>
ELECTRONIC MARKETS

APR 26       THE FUTURE

PRESENTATIONS WILL BE SCHEDULED BETWEEN MARCH 22 AND APRIL 26, TOPIC COVERAGE ON THESE DATES MAY CHANGE DEPENDING ON STUDENT INTEREST CRITICAL REVIEWS MUST BE COMPLETED BY MARCH 8.
TENTATIVE READING ASSIGNMENTS

READINGS IN BOLD CAN BE USED FOR READING REPORTS

JAN 11 OVERVIEW, BASIC DISTINCTIONS, WHAT IS KNOWLEDGE?

JOHNSON CHAPTERS 1-3, 5

Recommended:

JOHNSON (1996) Organizational Information Seeking Chapter 5


Kilduff & Tsai Chapter 1

Watts Chapters 1 & 2


JAN 18 NODES AND RELATIONSHIPS

NEED DISCUSSION OF ORG CHART, ORG DESIGN.


Scott Chapter 1, 2, 8

Kilduff and Tsai Chapter 2

One of the following:


Krackhardt, D. & Hanson, J. R. Informal networks: The company behind the chart. In


JAN 25 SOFTWARE AND INDICES- COMPARING NETWORKS, EGO NETWORKS, REACHABILITY, GEODISIC DISTANCES, ZONE SIZE, DENSITY

Scott Chapter 3, Appendix

Recommended:


Feb 1 SOFTWARE AND INDICES- ROLES, CLIQUES, AND BROKERAGE

Kilduff & Tsai Chapter 3
Scott Chapter 6-8


Recommended:


FEB 8 SOFTWARE AND INDICES- CENTRALITY, PROMINENCE, AUTONOMY


Scott Chapter 5

One of the following


FEB 15 FORMAL AND MARKET APPROACHES


Watts, Chapter 9

Recommended:


FEB 22 CONTAGION AND COHESION


Scott Chapter 7

Watts Chapter 6, 7

Recommended:


Mar 1 OTHER THEORIES


Kilduff and Tsai (Chapter 4, 5, 6, 7)

MAR 8 THE DISTRIBUTION OF KNOWLEDGE

Lawrence, P.R. and J.W. Lorsch (1967a), ‘Differentiation and integration complex


Need TACIT VS. EXPLICIT overview article


MAR 22 SEEKING KNOWLEDGE


Recommended:

University.

MAR 29 DIFFUSING KNOWLEDGE


Recommended:


April 5 INNOVATION AND KNOWLEDGE MANAGEMENT


Recommended:


JOHNSON 2005 CHAPTERS 4, 6

Watts Chapter 8

April 12 COLLABORATION, Communities of Practice

RECOMMENDED:


Johnson, J.D. (2005), ‘A sociometric analysis of influence relations within a community of practice’, unpublished paper, College of Communications and Information Studies, University of Kentucky, Lexington, KY.


Recommended:


APRIL 19 VIRTUAL ORGANIZATIONS, MNCS, ELECTRONIC MARKETS

Recommended:

Pergamon Press. Chapter, Basic Structures of Multinational corporation, pp. 193-211.


Nohria, N. & Berkley, J. D. The virtual organization: Bureaucracy, technology, and the implosion of control.


April 26 FUTURE, summing up

JOHNSON CHAPTER 7

Watts Chapter 10

BIOGRAPHICAL SKETCH

J. DAVID JOHNSON (PH.D, Michigan State University, 1978) is currently a professor in the Department of Communication and Dean of CCIS. He has also held academic positions at the University of Wisconsin-Milwaukee, Arizona State University, the State University of New York at Buffalo, Michigan State University, and was a media research analyst for the U. S. Information Agency. He has authored over 70 refereed publications and he has been recognized as one of the most prolific scholars in the field of communication. His publications have appeared in such journals as Academy of Management Review, Communication Yearbook, Human Communication Research, Communication Research, Communication Monographs, and Social Networks. He has also received grants from the National Cancer Institute, Michigan Department of Public Health, Michigan Department of Transportation, and National Association of Broadcasters. His major research interests focus on organizational communication structures, knowledge management, innovation, information seeking, and health communication. He has published four books: Cancer-related information seeking, Hampton Books; Information seeking: An organizational dilemma, Quorum Books; Organizational communication structure, Ablex, and Innovation and knowledge management: The Cancer Information Science Research Consortium, Edward Elgar.

Current Projects/Activities

This semester I am focusing on network analysis projects related to my four year research project focusing on innovation in the Cancer Information Service. I am also hoping to improve my skills related to network analysis computer programs, particularly the new version of UCINET. I am also working on a draft of my next book- Knowledge Networks.