

Syllabus for  
*Seminar in Human Resources Development*

Instructor: Dr. D. W. Drewes  
Time: Mondays, 7:30 p.m. to 10:15 p.m.  
Place: 724 Poe

**Context:**

The Scientific Revolution rekindled the light of human understanding to bring the dark ages to a close. Now, after some 400+ years, we stand on the brink of yet another major paradigm shift - the Cognitive Revolution. The dualism between mind and body that has ruled scientific thought and method is being seriously questioned. Mind heretofore relegated to the domain of philosophy is being reinstated as having a legitimate role in scientific explanation, although in new garb. The observer is being accorded an active role in contrast to that of passive bystander subject to immutable causal laws. Nature is increasingly seen as a complex process viewed through the prism of dynamic change. Living systems with their ever-changing complexities of form and function are capturing the scientific spotlight.

Central to the Cognitive Revolution is the notion of *system* as the requisite frame of analysis. The relevance of the systems concept is attested by a number of contemporary themes—systems approach, general systems theory, systems thinking, systems dynamics, non-linear causality, feedback, quantum mechanics, complexity, chaos, dissipative systems, social systems, human systems. Yet few concepts in the English language are so widely used but so woefully misunderstood. In order for *system* to be a useful concept, there must be recognizable boundaries as to what is system and what is not system. Without defining boundaries, everything is potentially a system and consequently no differentiation is possible. Consequently, we will launch on an intellectual journey through abstract system-land, pointing out the significant landmarks and their historical significance. This journey will require trekking through the major stages of human enlightenment, albeit at an accelerated pace. The purpose of the journey is to document the steady progression of human understanding, from its earliest roots embedded in a certainty initially grounded in religion and later in logical analysis to a postpositivist uncertainty emanating from relativity theory and quantum mechanics. As complexity and uncertainty come to the fore as the primary characteristics of reality, so does systems theory rise as the premier cognitive and methodological means of operating in a world where relation not substance is coming to be seen as the defining essence.

## Objective:

It is the purpose of PSY 750 to explore the implications of the Cognitive Revolution for the design, delivery and evaluation of human services in a social/organizational systems context. In short, we will investigate the theoretical/methodological/practical ramifications of intervention at the systemic level. To accomplish our purpose, we will read and discuss assigned materials from over two-dozen books, most published within the last ten years. Reference books are in the Reserve Room of the D.H. Hill Library. All books are to be used within the confines of the Reserve Room. If you wish to copy materials for personal use, please use the copiers in the Reserve Room and return the book to the shelf where found. In this way, we will be assured that books will not be misplaced.

## Procedure:

Each class period will be divided into two parts. The first section will be devoted to a discussion of topical questions designed to stimulate class dialogue, where dialogue is defined as a free exchange of ideas in the context of a willingness to open personal values and beliefs to re-examination and affirmation. Individual class members will serve on a rotating basis as group leader for separate questions. Approximately 15 minutes will be devoted to each question. Group leaders will have discretion as to the format selected for group dialogue on the assigned question. The second portion will be devoted to a synthesis and summary of the current assigned readings and will be moderated by the instructor. Approximately 30 minutes will be devoted to this activity. Assignments will be given on a weekly basis. Each student will be responsible for summarizing his or her positions/responses to each of the assigned questions. Required readings are provided for each assignment and numbered to indicate suggested reading sequence. A list of optional readings is also provided.

The course will be administered using the NC State WolfWare Course Management System. All relevant course material will be available on the Web. The course boilerplate page can be viewed at <http://courses.ncsu.edu/psy750/>. The course boilerplate page is the entry portal and is linked to the course home page, which is subsequently linked to class assignments. Responses to dialogue questions are to be submitted weekly via the **Message Board** link on the course boilerplate page. Each student is expected to post a topical response containing responses to all dialogue questions using the **Post New Topic** button. Responses must be submitted by 12:00 pm on the date of each class meeting. Responses will be collected and sent via e-mail to each student prior to 4 pm. Replies to other students' topical response are encouraged and can be made using the **Post a Reply** button. Email messages can be sent to the instructor

plus all enrolled students at: [psy750-001@wolfware.ncsu.edu](mailto:psy750-001@wolfware.ncsu.edu). Class members are encouraged to make extensive use of the message sharing facility.

**Evaluation:**

Individual performance will be assessed according to (1) a formal end-of-semester essay (minimum of 20 double-spaced pages) prepared in APA format devoted to a scholarly presentation of a course-generated topical issue or area (75%); (2) individual class participation (15%); and (3) the scope/extent of individual readings (10%). The essay topic must receive prior instructor approval. Course grades will follow NCSU plus/minus format. Outside readings must be in a diary format with full bibliographic references and a brief evaluative summary. Bibliographic sources may consist of supplemental readings from books on course reserve, as well as other material of comparable scientific worth.

---

# PSYCHOLOGY 750

*Fall Semester 2006 - Dr. D. W. Drewes, Instructor*

## **Class Schedule**

- August 28 Overview and orientation
- September 4 No class (Labor Day)
- 11 Introduction to systems thinking
- 18 General systems theory
- 25 Systems philosophy
- October 2 Open systems and complexity
- October 9 Chaos and order
- 16 The dynamics of human action
- 23 Human systems at the cultural/social level
- 30 Organizations as systems
- November 6 Systemic intervention: Methodology
- 13 Systemic intervention: Practice
- 20 Systemic intervention: Soft systems
- 27 Social systems design I
- December 4 Social systems design II
- 11 Individual project oral presentations
- 
- 18 No class. Project hard copy and readings log due

# PSYCHOLOGY 750

*Fall Semester 2006 - Dr. D. W. Drewes, Instructor*

## Reserve Reading List

Altermann, G. & Koch, W. A. (Eds.). (1998). Systems: New paradigms for the human sciences. Berlin: Walter de Gruyter.

Anderson, R. E., & Carler, I. (1999). Human behavior in the social environment: A social systems approach. New York: Aldine de Gruyter.

Banathy, B. H. (1996). Designing social systems in a changing world. New York: Plenum Press.

Bates, F. L. (1997). Sociopolitical ecology. New York: Plenum Press.

Byrne, D. (1998). Complexity theory and the social sciences: An introduction. London: Routledge.

Butz, M. R. Chaos and complexity: Implications for psychological theory and practice. Washington, DC: Taylor and Francis.

Capra, F. (1999) (a). The web of life. New York: Doubleday.

Capra, F. (2002) (b). The hidden connections. New York: Doubleday.

Checkland, P., & Scholes, J. (1990). Soft systems methodology in action. Chichester, UK: Wiley.

Geyer, F., & van der Zoawen, J. (2001). Sociocybernetics: Complexity, autopoiesis, and observations of social systems. Westport, CT: Greenwood Press.

Juarrero, A. (1999). Dynamics in action: Intentional behavior in complex systems. Cambridge, MA: The MIT Press.

King, I. T. (2000). Social sciences and complexity. Huntington, NY: Nova Sciences Publishers.

Laszlo, E. (1996). The systems view of the world: A holistic vision for our time. Cresskill, NJ: Hampton Press.

- Lewis, M. D. and Granic, I. (Eds.). (2000). Eds. Emotion, development and self-organization. Cambridge: Cambridge Press.
- Luhmann, N. (1995). Social systems. Stanford, CA: Stanford University Press.
- Mainzer, K. (2004). Thinking in complexity: The computational dynamics of matter, mind, and mankind. Berlin: Springer-Verlag.
- Marion, R. (1999). The edge of organization: Chaos and complexity theories of formal social systems. Thousand Oaks, CA: Sage.
- Midgley, G. (2000). Systemic intervention: Philosophy, methodology, and practice. New York: Plenum Press.
- Midgley, G. (Ed.). (2003). Systems thinking. Vols. 1 – 4. London: Sage Publications.
- Mingers, J. (1995). Self-producing systems: Implications and applications of autopoiesis. New York: Plenum Press.
- Morçöl, G. (2002). A new mind for policy analysis. Westport, CT: Praeger.
- Peat, F. D. (2002). From certainty to uncertainty. Washington, DC: Joseph Henly Press.
- Rasch, W., & Wolfe, C. (2000). Observing complexity: Systems theory and postmodernity. Minneapolis, MN. University of Minnesota Press.
- Rowland, G. A. (1999). A tripartite seed: The future creating capacity of designing, learning and systems. Cresskill, NJ: Hampton Press.
- Sanders, T. I. (1998). Strategic thinking and the new science: Planning in the midst of chaos, complexity, and change. New York: The Free Press.
- Stacey, R. (2001). Complex responsive processes in organizations: Learning and knowledge creation. London: Routledge.
- Thuan, T. X. (2001). Chaos and harmony: Perspectives on scientific revolutions of the twentieth century. Oxford, UK: Oxford University Press.