





Intersession, 1988 May 9 - June 17 Tuesday and Thursday, 9:30 - 12:15 p.m. Location: MPX 8651 Professor: Dr. Phil Winne

Office: MPX 9611 Telephone: 291-4858

PREREQUISITES:

Education 401/402 or equivalent.

Education 320 or Education 422 or a 300-level course in Psychology (e.g., Psychology 320) is strongly recommended.

## **DESCRIPTION:**

This course surveys current research on cognitive skills and learning strategies as a specialization within instructional psychology. It describes what cognitive skills and learning strategies are, and explores applications of this research to instructional practice.

Students interested in examining how research in instructional pyschology can be applied in education will profit from this course. Teachers and prospective teachers will acquire knowledge which can be applied to planning, delivering, and evaluating teaching. For psychology students, this course extends research on learning and motivation into the context of one of society's most influential and pervasive "laboratories," the school and university classroom.

## **OUTLINE OF TOPICS:**

- > Overview of instructional psychology
- > Representations for knowledge and for cognitive skills
- > Reasoning strategies, heuristics and biases, analogical reasoning
- > Problem solving strategies: general and domain specific (mathematics, physics)
- > Strategies for comprehending and learning from text
- > Self-regulation and motivational strategies
- > Creativity
- > Educational programs that address cognitive skills and strategies

## **REQUIREMENTS:**

- > Approximately 80 pages of reading per week from books and xerox materials on reserve
- > Various written assignments (30%)
- > Analyzing a set of research articles to draw implications for instruction (35%)
- > Final exam (35%)

## READINGS

Materials on reserve.