



Course Syllabus

SPED_5660.01 COURSE NUMBER AND SECTION Catherine Korobey/ INSTRUCTOR korobeca@webster.edu E-MAIL ADDRESS

Cognitive_Development: Implications For School-Aged Children with Special Needs COURSE TITLE Spring03 TERM / 3 CREDIT HOURS

WEBG SITE

1. Course Description: (provide details of student focus, rationale, scope, and prerequisites)

This course focuses on the implications of current research in the area of cognitive development and learning theory as it affects the education of children with special learning characteristics. Students examine advances in research on brain theory, theories of learning, metacognition, memory and related aspects of learning, exploring applications to individualized education. It addresses the following goals of the School of Education: Goal 1: Knowledge of content; Goal 2: participation in a community of learners; Goal 3: Modeling effective teaching practices; Goal 4: Being innovative and experimenting with curriculum; Goal 5: Embracing diversity; Goal 6: Reflection on practice as a means to change.

2. Learning Outcomes: (goals, objectives, course outcomes, etc.) Identify any MOSTEP or professional standards that are met by each learning outcome.

The student will:

- correlate neuroscientific approaches to brain study with learning theory
- determine implications for special education of three learning theories
- compare constructs and assessment of intelligence
- integrate language and cognitive development constructs
- critique models of curriculum based on cognitive processes
- develop strategies based on learning theory research

3. Schedule of required readings, class preparations and assignments, lectures, discussions, student presentations, out-of-class assignments and exams.

Because of the nature of the course, no one will be admitted after the first class and anyone missing the first class will be dropped from the course.

WEEK 1: The physiological view of learning: a review of the current theory for the education of children with special educational needs.

Readings: "What the Biology of the Brain Tells Us about Learning"; "What's Happening in Students' Brains May Redefine Teaching"; "Seven Strategies that Encourage Neural Branching"; "What's Happening in Students' Brains May Redefine Teaching"; "How Emotions Affect Learning"; "Educator's Guide to Books on the Brain"; "Building a Better Brain"

Assignment: Learning Journal, due week 8

WEEK 2: Theories of learning: the behavioral approach and its applications for the education of children with special needs.

Readings: SA: "Mind and Brain"; "Conceptual Learning"; "Sizing Up the Sexes"

Assignment: Development of a learning chain incorporating fading and shaping, informal

WEEK 3: Theories of learning: the developmental approach and its applications for the education of children with special needs; social constructivism and special education.

Readings: SA: "The Developing Brain"; Foreman and Fyfe, "The Negotiated Curriculum"; "Problem Finding and Solving in Play"; "Piaget's Theory"

Assignment: Observation of children's performance on given tasks to determine level of functioning according to the theory of Piaget.

WEEK 4: Theories of learning: the cognitive approach and its implications for the education of children with special needs; cognitive value of toys.

Readings: "Information Processing"

WEEK 5: Language and cognition: physiological structures of language; interrelated nature of the constructs; an integrated approach to language development; implications of the research for the education of children with special learning needs.

Readings: SA: "Brain and Language"; Nobody Nowhere or Somebody Somewhere (to be provided)

Assignment: Analysis of language sample

WEEK 6: Autism: Window on disabilities; perceptual and motoric learning: historical approach to theories; implications of current research.

Reading: SA: "Visual Image in Mind & Brain"; more readings on autism

Assignment: Observation of proprioceptive and vestibular activities in children with perceptual-motor dysfunction

WEEK 7: Metacognition: knowing what you know and how to manage it; implications for education; cognitive structures

Reading: excerpts from Superlearning

Assignment: Research Paper, 7-10 pages

WEEK 8: Sharing research projects

Assignment: Annotated bibliography for Research Paper, one page for distribution to the class

The Missouri Show-Me Standards are addressed within the content of this course. Identification of specific standards are included within course assignments. Integration of Missouri Assessment Program (MAP) standards and grade levels will be integrated into this course when appropriate.

4. **Resources:**

Text Used: multiple readings, including Scientific American, September 1992 (vol. 267, No. 3); Nobody Nowhere or Somebody Somewhere

Supplemental Readings: (List and indicate how these are to be used.)

A bibliography will be distributed weekly

Audio Visual/Other : video tapes will supplement learning

5. **EVALUATION:**

a) Research Paper and presentation	30%
b] Class participation & assignments	20%
d) Class activities	20%
e) Journal	30%

Emphasis will be on reading and thinking, with reflections in journal format. Some assignments will be completed in class; others will require out of class completion. This class has a very fluid structure; the syllabus is a guide, not an agenda.

6. **3 Hour Courses:** Students taking an 8 week course for 3 credit hours will complete the following additional assignments and/or attend the following additional class meetings;

Students will be given an option of three outside of class projects to compensate for eight week/three credit format.

1. Analysis of toys as means of cognitive development
 2. Analysis of perceptual experiences, Science Center
 3. PBS Brain series
- or a preapproved proposal of your own design.

4. **FINAL PROJECTS:** Final projects/papers will be returned to students in the following manner:

- Projects/Papers will be returned during the last meeting period.
- Students should provide a self-addressed stamped envelope (appropriate size and postage) to the instructor so project/paper can be returned.
- Other (explain)

NOTE: Papers will not be available for pick up from the School of Education Office.

- This syllabus is subject to change at the discretion of the instructor.
- Regular class attendance is required.