

WEBSTER UNIVERSITY
COURSE SYLLABUS

ECED 5510.01
COURSE NUMBER AND SECTION

Dr. Theresa Prosser
INSTRUCTOR

Cognitive Development:
Implications for Early Childhood Education
COURSE TITLE

TERM: FA II 2001

50
SITE

1. This course focuses on the cognitive development of children birth to 8 years of age. An introduction and comparison of various cognitive developmental theories are explored. An in-depth examination of Piaget, Vygotsky, and recent discoveries in brain research is conducted through readings and observations. Emphasis is placed on a constructivist theory, which includes the representational and physical domains as well as the cognitive domain. An examination of the interrelatedness of these domains within the framework of a developmentally appropriate curriculum for infants, toddlers, and young children demonstrating typical and atypical development is an important factor in this course. Information from Project Construct is used as a model in examining curricular implications and implementation.
2. Learning Outcomes: (Goals, objectives, course outcomes, etc.)
 1. Compare and contrast various theories of cognitive development.
 2. Understand the psychological and biological perspectives of cognitive development.
 3. Understand the cognitive development of infants and toddlers.
 4. Understand the cognitive development of preschoolers.
 5. Understand the cognitive development of primary grade children.
 6. Understand and apply a constructivist theory in the development of an appropriate math and science curriculum and methodology fostering logio-mathematical, physical, scientific and conventional knowledge.
 7. Understand and apply a constructivist theory in the development of appropriate language, language arts, literacy, and fine arts curriculum and methodology fostering symbolic and language development.
 8. Understand and apply a constructivist theory in the development of appropriate perceptual, small and large motor curriculum and methodology fostering physical development.

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

Topics listed for discussions each week are to read prior to the class. For example: Number will be discussed Week 3, read the book Number, by Kamii prior to class.

WEEK 1: Introduction to course
Various theories of cognitive development will be discussed.

These include Piaget, Skinner, Vygotsky, Gesell, Montessori, Gardner, and recent finding in brain research.

WEEK 2: Cognitive development in infants and toddlers.
Prenatal development – critical periods
Infant perception: visual, auditory, tactile/kinesthetic, olfactory, and gustatory development
Sensorimotor development according to Piaget
Curricular issues related to infants and toddlers

WEEK 3: Preoperational Development
Physical Knowledge
Curricular issues related to teaching science
Introduction to logicomathematical knowledge
Read *Number* by Kamii

WEEK 4: Preoperational Development
Logio-mathematical Knowledge continued
Curricular issues related to teaching math
Read *The young child and mathematics* by Copley

*******SENSORIMOTOR PROJECT DUE*******

WEEK 5: Representational Development
Symbolic Development
Curricular issues related to teaching art and music
Integrating the Curriculum
Video: Portrait of a Lion

*******1st PREOPERATIONAL PROJECT DUE*******

WEEK 6: Representational Development
Language Development
Curricular issues related to teaching literacy and language arts
Read *Learning to read & write* by Neuman, Copple, & Bredekamp

WEEK 7: Physical Development
Perceptual Motor Development
Curricular issues related to teaching fine and gross motor skills
Technology in the classroom

*******2nd PREOPERATIONAL PROJECT DUE*******

WEEK 8: Student Presentations

*******CURRICULUM PROJECT DUE*******

4. Resources:

Texts:

Copley, J. (2000) *The young child and mathematics*. NAEYC
Kamii, Constance (1982) *Number is preschool and kindergarten*.
Neuman, Copple, & Bredekamp (2000) *Learning to read & write*. NAEYC

Supplemental Readings:

Handouts will be provided from Project Construct. Other handouts will be provided as needed. Students are responsible for all assigned readings.

5. EVALUATION

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|------------------------|-----|
| a) Term Paper | NO |
| b) Examinations | NO |
| c) Class participation | YES |
| d) Class presentation | YES |
| e) Other | YES |

Three projects directly related to understanding the constructivist theory:

1. Sensorimotor Project
2. Preoperational Project (ages 3 to 5)
3. Preoperational Project (ages 6 to 8)

Students will also complete a curriculum project using a constructivist, developmentally appropriate, integrated approach.

CLASS ATTENDANCE AND PARTICIPATION:

No more than one excused absence is permitted. A no-credit is given to anyone missing more than one class.

It is the student's responsibility to notify instructor of an absence. It is also the student's responsibility to make up missed work, pick up any handouts, or get missed notes.

Incompletes are given at the discretion of the instructor and under unusual circumstances. It is the student's responsibility to notify the instructor of any problems. Incompletes will not be discussed beyond the 6th week of class except in extreme cases.

A letter grade of "B" is the highest grade given to students granted an incomplete.

Grading System: A – Outstanding
B – Very Good – Above Average
C – Average
D – Below Average
F – Failing

This is a M.A.T. class. All students are expected to achieving a minimum of above average work. This not only includes content knowledge but also writing and problem solving skills. I expect work to be the caliber of graduate students.

6. Final Projects

Final projects will be returned to students in the following manner:

Student should provide a self-addressed stamped envelope (appropriate size and correct postage) to the instructor.

Make arrangements with instructor prior to the end of the final class.

This syllabus is subject to change at the discretion of the instructor.