**GRANDE PRAIRIE REGIONAL COLLEGE**
**EARLY CHILDHOOD DEVELOPMENT**

# CD2050
# SCIENCE, MATH AND SOCIAL KNOWLEDGE

**SEMESTER:** Fall 2003-2004
**CREDITS:** 3
**HOURS:** 45
**DATES:** Sept. 4 -Dec. 12
**DAYS:** Tuesdays
**TIMES:** 6:00 - 8:50
**LOCATION:** H 135

**INSTRUCTOR:** Karen Kennedy
**PHONE:** 539-2040
**OFFICE:** H133
**Email:** kkennedy@gprc.ab.ca
**OFFICE HOURS:** posted or by appointment

**COURSE DESCRIPTION:** This course introduces students to science, mathematical and social knowledge. The course emphasis is on integrating social, physical and logical mathematical experiences in the preschool child's environment. Students learn to use developmentally appropriate curriculum to facilitate the young child's construction of knowledge in these areas.

**PREREQUISITES:** Successful completion of first year or consent of the department.

**TEXT:** A course package (CD2050 - Science, Math, and Social Knowledge) is available at the bookstore.

**ADDITIONAL MATERIALS AND EXPENSES:** You will incur photocopying expenses and expenses for projects and assignments.

**OBJECTIVES:** On successful completion of this course, you should be able to:

- describe how young children develop physical, social and logical-mathematical knowledge
- use a developmentally appropriate approach to plan a variety of experiences that will facilitate the child's development of physical, social and logical[mathematical knowledge

**TEACHING METHODS:** Lectures will incorporate A.V. materials, discussion, in-and out-of-class activities and assignments.

**GRADING POLICY:** A final grade of D (1.0) must be obtained in order to pass this course. The final grade is base on: Assignments (95%), Attendance/Participation (5%).

Assignment and final grades will be based on the following 4-point grading system:

| Alpha Grade | 4-point Equivalence |
|---|---|
| A+ | 4.0 |
| A | 4.0 |
| A- | 3.7 |
| B+ | 3.3 |
| B | 3.0 |
| B- | 2.7 |
| C+ | 2.3 |
| C | 2.0 |
| C- | 1.7 |
| D+ | 1.3 |
| D | 1.0 |
| F | 0.0 |

**ASSIGNMENTS:** A variety of learning tasks to be completed in- and out-of-class will be assigned during the semester. These will contribute to 30% of the final grade. Three assignments will contribute to 65% of the final grade. An assignment package will be provided in the first full week of classes.

**CLASS POLICIES:**
***It is the right of the student and of the instructor to a favorable learning/teaching environment. It is the responsibility of the student and the instructor to engage in appropriate adult behaviors that positively support learning. This includes, but is not limited to, treating others with dignity and respect.***

**The student must be familiar with the E.C.D. student handbook and students' rights and responsibilities found in the College calendar.**

- Regular attendance and active class participation help you understand the content and be a successful student. Absence from 20% of the class hours will result in a grade of 0 for attendance/participation.

- Assignments are due in-class or before 4:30 on the assignment due date. Late assignments will be deducted an initial 5% and 1% per day, including weekends. Assignments will receive a grade of 0% after 10 days late.

- All work should be typewritten (or neatly handwritten) and double-spaced. Points will be deducted or the work may be required to be rewritten when there are significant spelling or grammatical errors. Refer to the College calendar and the E.C.D. Student Handbook for assignment submission guidelines.

- Projects with other students require your active involvement and contribution. Group work will include peer and self-evaluations as well as an assigned grade for the project.

- Graded assignments will normally be returned within two weeks.

- The last day to withdraw from this course with full refund of tuition is _____
  The last day to withdraw from this course with permission (W is assigned by the Registrar's office) is _____

- Changes to this course outline will be discussed with you in class.

## RESOURCES
## FOR
## CD2050 SCIENCE, MATH AND SOCIAL KNOWLEDGE


_____ (1993). *Creative Teaching in Early Childhood Education.* Toronto, ON: Harcourt Brace Javonovich

Baratta-Lorton, M. (1972). *Workjobs, activity centered learning for early childhood education.* Don Mills, ON: Addison-Wesley

Benish, D. (1977). *Water, water everywhere: science through water play.* Lewisville, NC: Kaplan Press

Canady, R. & Raines, S. (1989). *Story stretchers and activities to expand children's favorite books.* Beltsville, MD: Gryphon House

Charlesworth, R. & Radeloff. (1978). *Experiences in Math for Young Children.* Albany, NY: Delmar

Derman-Sparks, L. (1989). *Anti-bias curriculum: tools for empowering young children.* Washington, DC: NAEYC

Fleming, B. & Hamilton, D. (1977). *Resources for Creative Teaching in Early Childhood Education.* New York, NY: Harcourt Brace Jovanovich

Fleming, B. et al. (1993). *Creative teaching in early childhood education: a sourcebook for Canadian educators and librarians.* Toronto, ON: Harcourt Brace Jovanovich

Granovetter, F. & James, J. (1989). *Sift and shout: sand play activities for children ages 1-6.* Lewisville, NC: Kaplan Press

Harlan, J. & Rivkin, M. (1996). *Science experiences for the early childhood years: an integrated approach.* Englewood Cliffs, NJ: Merrill

Hendrick, J. & Chandler, K. (1993). *The Whole Child Canadian 6th ed.* Scarborough, ON: Prentice Hall

James, J. (1987). *Waterworks: water play activities for children age 1-6.* Lewisville, NC: Kaplan Press

Lind, K. (1991). *Exploring Science in Early Childhood: a developmental approach.* Albany, NY: Delmar

Macdonald, S. (1996). *Squish, sort, paint & build: over 200 easy learning center activities.* Beltsville, MD: Gryphon House

Miller, K. (1984). *Things to do with Toddlers and Two's.* Chelsea, MA: Telshare Publishing

Miller, K. (1989). *The Outside Play and Learning Book.* Chelsea, MA: Telshare Publishing

Mitchell, A. & David, J. (eds). (1992). *Explorations with young children: a curriculum guide from the Bank Street College of Education.* Mt. Rainier, MD: Gryphon House

Seefeldt, C. & Galper, A. (2000). *Active Experiences for Active Children: Social Studies.* Upper Saddle River, NJ: Merrill

Shaw, J. & Blake, S. (1998). *Mathematics for Young Children.* Englewood Cliffs, NJ: Prentice Hall

Smith, S. (2001). *Early Childhood Mathematics, 2nd ed.* Needham Heights, MA: Allyn & Bacon

Taylor, B. (1993). *Science Everywhere: opportunities for very young children.* Orlando, FL: Harcourt Brace Jovanovich

Waite-Stupiansky, S. (1997). *Building Understanding Together: a constructivist approach to early childhood education.* Albany, NY: Delmar

York, S. (1991). *Roots and Wings: affirming culture in early childhood programs.* St. Paul, MN: Toys 'n Things Press

**PERIODICALS**

*Young Children*
*Day Care and Early Education*
*Child Care Information Exchange*

**WEB SITES**

www.perpetualpreschool.com
www.npin.org
www.nccic.org