GRANDE PRAIRIE REGIONAL COLLEGE EARLY LEARNINGAND CHILD CARE PROGRAM CD2050 Science Math and Social Knowledge

Semester:FallInstructor:Jane HowesHOURS:30Office hours:CREDITS:3PHONE:539 2045DATES:Sept. 9- October 28E-MAIL:jhowes@gprc.ab.caDAYS:Mon. & Wed.CLASS TIMES:Mon./Wed. 9:00-11:20 a.m.

LOCATION: B303

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 department.

EXPENSES:

Additional Materials and Expenses: You may incur photocopying expenses and expenses for projects and assignments.

REQUIRED TEXTS:

COURSE OBJECTIVES:

On completion of this course you should be able to:

- 1. describe young children's development of physical, social and logical mathematical knowledge
- 2. 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

CLASS FORMAT:

Classes will be comprised of lectures, independent and small group tasks, class discussion, and guest speakers.

ATTENDANCE REQUIREMENTS:

Attendance in this course is important as a significant amount of the course content is covered through in-class tasks and discussions. 10 % of the final grade will be based on class attendance and participation.

Due Dates: Will be provided in first week .An instructor – student contract is available if the student cannot meet the due date.

Assignment Standards: The instructor has the right to require typewritten submissions completed on a word processor equipped with a spell check. Good drafts of assignments received at least 3 days prior to the due date (excluding weekends) will be reviewed for recommendations to enhance the grade. These submission must be clearly marked "DRAFT" otherwise they will be considered as the formal submission for the assignment. The instructor will not accept responsibility for any errors missed in reviews of draft assignments.

Evaluation

ALPHA GRADE	4-POINT EQUIVALENCE	DESCRIPTOR
A+	4.0 (90-100)	Excellent
А	4.0 (85-89)	
A-	3.7(84-80)	First Class Standing
B+	3.3 (79-75)	
В	3.0 (74-71)	Good
B-	2.7(70-66)	
C+	2.3 (67-69)	Satisfactory
С	2.0(64-66)	
C-	1.7(60-63)	
D+	1.3 (55 59)	Poor
D	1.0 (50 -54)	Minimal Pass
F	0.0 (49 – 0)	Failure

The Human Services Department uses the alpha grading system as outlined below:

CLASS POLICIES:

It is your responsibility to become familiar with the basic student rights and responsibilities found in the College calendar and the following policies for this class.

- Demonstrate your commitment to learning by attending all classes, arriving on time.
- Use class time to its best by being prepared for each class, contributing thoughtfully to discussion, and participating actively and appropriately in class.
- Keep your discussion related to the topic or activity. Side conversations are very distracting. Whether the instructor or a classmate "has the floor", please respect others by refraining from conversing with your neighbors.
- Cell phones are not permitted in the class, If you are expecting an urgent call, please let me know at the beginning of the class, and put your phone on vibrate.
- Regular attendance and active class participation help you understand the content and be a successful student.
- Absence from 20% and over of the class hours will result in a grade of 0 for attendance/participation.
- You do not need to ask for permission to be absent. If it is necessary for you to miss a class, I will assume that you have made the best decision for the circumstances and that you accept the consequences of your decision. Arrange to obtain copies of handouts, lecture notes, and other information you may need from a fellow student.

- Submit your assignments on time. On time means at the end of class or at the latest,4:30 p.m.on the due date.
- Late assignments will be penalized :
 - 1. An initial 5% a week for late assignments and after two weeks the student cannot hand in his/her assignment.
 - 2. Should a student be allowed to resubmit an assignment a grade of 60 % is the highest grade the student can receive.
 - 3. If a student lets the instructor know at least one week prior to the due date that it is not possible to have the assignment in on time a contract can be made with the instructor stating when the assignment can be submitted.
 - 4. Any assignment turned in and considered not to be your own work will result in the assignment being graded "0" and no opportunity to make up the assignment or missed points.
- Graded assignments will normally be returned within 2 weeks
- If you have concerns, questions or difficulties please contact me by phone, email or after class.

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 (90%), Participation (10%).

CD 2050 Schedule

Note: This schedule may change over the semester, however changes if any, will be announced in class.

Date	Торіс	Assignment
Sept. 9	Introduction	Discuss activities in
	Assignments	Children's Centre
Sept 14 -16	Define Types of Knowledge	Assignment #3 Part A
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Sept. 21 - 23	Discovery Learning	Assignment #1
Sept 28- 30	Math Concepts	Assignment #2
	Math Skill Development	
	Measuring	
	Comparing	
	Classifying	
	Reading & math	
Oct. 5 - 7	Math Concept Review	Assignment #2
	-	
Oct. 12	Thanksgiving No class Discuss math game	Assignment #2
		C .
Oct. 19 - 21	Science	Assignment #2
		Assignment #3 Part B

Science, Math and Social Knowledge Schedule

Oct 26 -28		Assignment #2
Nov. 6		
Nov.8	Discuss social knowledge	Assignment #2
	Holidays & diversity	
Nov. 15	Anti-bias curriculum	Assignment #2
	Attitudes & Values	Assignment #3 Part C

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

Final Grade's Compilation:	Weight
Assignment 1 (Game)	30 %
Assignment 2 (Presentation)	30 %
Assignment 3 (Analyze books Part A,B,C)	10 %
Assignment 4 (in class tasks)	25%
Participation in discussion and attendance	5%
Total :	100%

Note: Assignment #2 will be carried out throughout the semester in the form of small group presentations by small groups on a weekly basis.

RESOURCES FOR CD2050 SCIENCE, MATH AND SOCIAL KNOWLEDGE

PERIODICALS

Young Children Day Care and Early Education Child Care Information Exchange Interaction Web Sites: For some useful science ideas, you might want to check out these references:

- Allen. (2002). Look, Think, Discover: Adding the wonder of science to the early childhood classroom.
 Available at http://www.earlychildhoodnews.com/page2.aspx
 - Type in the name of the article and click 'Search'.
- b. Dorrell. (2002). *Bubble, Bubble, Pop! Exploring the magic of bubbles.* Available at <u>http://www.earlychildhoodnews.com/page2.aspx</u>
 - Type in the name of the article and click 'Search'.
- c. EarlyChildhood Today. (April 2006). *Scientific thinking step by step*. Available at <u>http://www.scholastic.com</u>
 - Click 'Teachers'.
 - Scroll down to 'Teaching Resources'.
 - Click 'Lesson Plans'.

- Scroll down to 'Browse All Lesson Plans By Grade'.
- Click on 'Grades PreK-K'.
- Type in the name of the article and click 'Search'.

For some useful mathematical ideas, you might want to check out these references:

- a. Damon, G. (2000). *Using everyday objects and materials to teach math.* Available at <u>http://www.earlychildhoodnews.com/page2.aspx</u>
 - The phrase 'Listed Alphabetically' can be found in the middle of the screen. Underneath those words, click on the phrase 'Math & Science'.
 - A new screen pops up with a list of titles. The article is in that list.
 - Click on the words: Using everyday objects and materials to teach math.
- b. Fromoluti, C. S., Magarity, D. & Rinck, N. (1999). *Early childhood: Where learning begins. Mathematics: Mathematical activities for parents and their 2- to 5- year old child.* Short version format available at <u>http://www.ed.gov/pubs/EarlyMath/title.html</u>.
 - Once the page opens, scroll to the bottom of the page and click on the word 'UP' which is in a box with a blue-grey background.
 - Click on each item to get the information, e.g., title page, preface, introduction, etc.

A long version of this article has been archived, but is still available at <u>http://www.eric.ed.gov/ERICWebPortal/Home.portal</u>

- The Education Resources Information Center screen appears. To the right of the words 'Search Term(s)' type in the name of the article, i.e., *Early childhood:* Where learning begins. Mathematics.
- Click on 'Search'.
- Another screen will appear; a number of publications are listed. Click on *Early childhood: Where learning begins. Mathematics: Mathematical activities for parents and their 2- to 5- year old child.*
- Another screen will appear. Click on the words 'ERIC full text'.
- c. *Resources on early learning. Tip Sheets. The path to math: Classification.* Available at <u>http://www.illinoisearlylearning.org/tipsheets/math-class.htm</u>

For some useful information regarding social knowledge, you might want to check out these references:

- a. McCue, H. & Associates. (2002). *The Learning Circle. Classroom Activities on First Nations in Canada*. Available at <u>http://www.ainc-inac.ca/index-eng.asp</u>
 - Under the word 'Search', type in *The Learning Circle*. *Classroom Activities on First Nations in Canada*.

- Another screen will appear. It lists all the articles related to *The Learning Circle*. *Classroom Activities on First Nations in Canada*.
- b. Hall, N. (1999). *Creative resources for the anti-bias classroom*. Albany, New York: Delmar **This is an excellent resource book for early childhood programs**.

c. Derman-Sparks, L., Gutierrez, M. & Phillips, C. (1994). *Teaching young children to resist bias: What parents can do.* Available at http://www.uua.org/re/reach/parenting/children_resist_bias.html

- d. Wilson, R. (1993). *Fostering a sense of wonder during the early childhood* years. Available at <u>http://www.epa.state.oh.us/oeef/early_childhood_years.pdf</u>
- e. Canadian Child Care Federation. *Helping children respect and appreciate diversity*. Available at <u>http://www2.frp.ca/CCCF35.pdf</u>
- f. Kaplan, N., Duerr, L., Merchant, L., & Davis D. (2003). *Intergenerational program resource guide*. Available at <u>http://intergenerational.cas.psu.edu/guidebook.htm</u>
 - In the fourth paragraph, you will see the following sentence. "The guidebook is available in hard copy or as a <u>downloadable 429k PDF file</u>". Click on the downloadable as a 429k PDF file and the guidebook will appear.