



DEPARTMENT OF HUMAN SERVICES
COURSE OUTLINE - FALL 2014
CD 2050 MATH, SCIENCE AND SOCIAL KNOWLEDGE

To be recognized for educational excellence in the fields of early learning & childcare and educational assistant training.

INSTRUCTOR: Terrah Lindsay B.Sc., M.S.

OFFICE: H134 **PHONE:** 539-2047

EMAIL: tlindsay@gprc.ab.ca

OFFICE HOURS: Mondays 11:30 - 12:30, Tuesdays and Thursdays: 12:00 - 12:30

PREREQUISITE(S)/COREQUISITE:

Successful completion of all first year courses OR consent of the department

TIME: Mondays 1:00-3:50, Tuesday/Thursday 8:30 -10:00

LOCATION: L229 and B201

REQUIRED TEXT/RESOURCE MATERIALS: Worth, K., & Grollman, S. (2003).

Worms, shadows, and whirlpools: Science in the early childhood classroom. Washington, DC: National Association for the Education of Young Children.

Canadian Child Care Federation (2010). Foundations for numeracy: An evidence-based toolkit for early learning practitioners. Toronto: CCCF and CL/CLRN.

**There may be additional costs incurred for photocopying and materials for presentation assignments

CALENDAR 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.

CREDIT/CONTACT HOURS: 3(3-0-0) / 45 hours

DELIVERY MODE(S):

Classroom instruction will include a combination of lectures, discussions, small and large group work. Audio-visual materials and other resources will also be used.

OBJECTIVES:

Upon successful completion of this course, the student will be able to:

- describe young children's development of 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

GRADING CRITERIA:

GRANDE PRAIRIE REGIONAL COLLEGE			
GRADING CONVERSION CHART			
Alpha Grade	4-point Equivalent	Percentage Guidelines	Designation
A ⁺	4.0	90 - 100	EXCELLENT
A	4.0	85 - 89	
A ⁻	3.7	80 - 84	FIRST CLASS STANDING
B ⁺	3.3	77 - 79	
B	3.0	73 - 76	GOOD
B ⁻	2.7	70 - 72	
C ⁺	2.3	67 - 69	SATISFACTORY
C	2.0	63 - 66	
C ⁻	1.7	60 - 62	MINIMAL PASS
D ⁺	1.3	55 - 59	FAIL
D	1.0	50 - 54	
F	0.0	0 - 49	FAIL
WF	0.0	0	FAIL, withdrawal after the deadline

TRANSFERABILITY:

** Grade of D or D+ may not be acceptable for transfer to other post-secondary institutions. Students are cautioned that it is their responsibility to contact the receiving institutions to ensure transferability

GRADING CRITERIA: Minimum pass in the Department of Human Services is C- effective August, 2012.

EVALUATIONS (How you get marks):

Invitation for Learning MATH	20%
Invitation for Learning SCIENCE FAIR	30%
Pinterest Resource	15%
Nature Walk	15%
In class assignments	20%

ATTENDANCE:

Regular attendance is crucial for student success. More than 20% absenteeism may constitute a failure except for medical or extenuating circumstances in which a doctor's letter may be required.

STUDENT RESPONSIBILITIES:

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. Cell phones are to be used outside of class time. Students are responsible for missed class time, including the gathering of resources handed out during class. Be sure to check moodle.

The college expects students' conduct to be in accordance with basic rights and responsibilities. Refer to the College Admissions Guide at <http://www.gprc.ab.ca/programs/calendar/> or www.gprc.ab.ca/about/administration/policies/

STATEMENT ON PLAGIARISM AND CHEATING:

Refer to the Student Conduct section of the College Admission Guide at <http://www.gprc.ab.ca/programs/calendar/> or the College Policy on Student Misconduct: Plagiarism and Cheating at www.gprc.ab.ca/about/administration/policies/**

**Note: all Academic and Administrative policies are available on the same page.

COURSE SCHEDULE/TENTATIVE TIMELINE:

The following course schedule is tentative and subject to revision.

- September 4 (R) Course Introduction
Defining Mathematical, Physical and Social Knowledge
- September 8 (M) Social Constructivism
September 9 (T) Constructing Mathematical Knowledge
September 11 (R)
- September 15 (M) ***Nature Walk - Terrah***
September 16 (T) The adult's role in constructing mathematical knowledge
September 18 (R)
- September 22 (M) ***Invitation for Learning Math/Nature Walk***
September 23 (T) Scientific inquiry
September 25 (R) Science and play
- September 29 (M) ***Invitation for Learning Math/Nature Walk***
September 30 (T)
October 1 (R) The adult's role in constructing physical knowledge
- October 6 (M) ***Invitation for Learning Math/Nature Walk***
October 7 (T)
October 9 (R)
- October 13 (M) Thanksgiving, no class
October 14 (T) What is social knowledge?
October 16 (R) Sharing Invitations for Learning MATH and Nature Walk
- October 20 (M) Switch with Tanya - you have Tanya's class
October 21 (T) Social knowledge curriculum
October 23 (R)
- October 27 (M) Science Fair
October 28 (T)
October 30 (R) Sharing Invitations for Learning SCIENCE

