

I. COURSE DESCRIPTION:

This course builds on concepts learned in Teaching Methods II. This course focuses on the environment that incorporates discovery-based learning as a teaching strategy. Students will learn how to plan naturalistic, informal and structured learning experiences, as well as, in-depth studies of topics.

II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

Upon successful completion of this course, the student will demonstrate the ability to:

1. **define cognitive development**
Potential Elements of the Performance:
 - Identify various cognitive development theories
 - explain current research on brain development
2. **understand the fundamental principles of science and math**
 - identify the five strands of math and the concepts associated with each strand
 - identify three areas of science, life, physical and earth, and the concepts associated with each area
 - plan developmentally appropriate activities to facilitate children's understanding of math and science concepts
3. **use process-oriented and divergent teaching techniques to incorporate cognitive experiences throughout the curriculum.** (*Reflection of CSAC Vocational #1*)
 - select developmentally appropriate methods of presenting cognitive experiences using process-oriented, open-ended teaching methods.
 - communicate and interact effectively with children to encourage problem solving, inquiry and discovery strategies
 - foster attitudes that encourage cognitive development
 - document children's learning experiences
 - use media assisted observation techniques
 - identify how cognitive learning opportunities can be incorporated into all learning centres
 - evaluate one's teaching and the learning of the children

III. TOPICS:

1. Cognitive development theories
2. Brain research
3. Fundamental math principles
4. Fundamental science principles
5. Fostering cognitive development
6. Documentation
7. Media assisted observation
8. Facilitating conversations with children

IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

- Exchange. (2006). **Curriculum: Brain Research, Math, Science. A Beginnings Workshop Book**. WA: Exchange Press, Inc.

TEXTS PURCHASED IN OTHER COURSES BUT USED IN THIS COURSE

- Crowther, Ingrid. (2006). **Child Development: A Primer (1st ed)**. Scarborough: Thomson Nelson. (purchased in previous semester)
- Eliason, C., and Jenkins, L. (2008). **A Practical Guide to Early Childhood Curriculum**. New Jersey: Pearson Education Inc. (purchased in previous semester)
- Haig,, J., Raikes, G., Sutherland, V. (2003). **Cites and Sources**. Canada: Thomson Canada. (purchased in previous semester)
- Jamieson , J., Bertrand,J., & Ibrahim, E. (Eds.). (2005). **Science of Early Child Development**. [online resource]. Winnipeg, MB.: Red River College. Retrieved from <http://www.scienceofecd.com>
- Kostelnik, M., Soderman, A., and Whiren, A. (2004) **Developmentally Appropriate Curriculum. Best Practices in Early Childhood Education**. N.J.: Pearson Education. (purchased in previous semester)
- Weitzman, E., and Greenberg, J. (2002). **Learning Language and Loving It**. (2nd Ed.) Toronto: Hanen Early Learning Program
- Wylie, Sally, (2004). **Observing Young Children –A Guide to Early Childhood Educators (2nd ed.)**. Toronto: Nelson Publishing

NOTE

- Membership in the ECE Resource Room is strongly recommended

V. EVALUATION PROCESS/GRADING SYSTEM:**ASSIGNMENTS 60%**

- Investigation Activity 30%
- Math Documentation Panel 15%
- Science Presentation 15%

TESTS (2) 30%**IN-CLASS/WEEKLY ACTIVITIES 10%**

Various in-class/weekly assignments will be handed in and/or reported on in class.

- This is a “process” course, and class participation is **essential**

PLEASE NOTE:

Regarding Student Progression through the three
Co-Requisite Core ECE courses:
***Teaching Methods(Curriculum Design, Math and Science),
Seminar, Field Practice***

Students must receive a minimum of a “**C**” (**2.0 G.P.A.**) in each semester’s **Teaching Methods, and Seminar**, courses and receive an “**S**” **Satisfactory in their Field Practice**, (in the case of Field Practice 1, students must receive a “**C**”) within the same semester, in order to proceed to the next semester’s co-requisite courses.

The following semester grades will be assigned to students:

Grade	Definition	<i>Grade Point Equivalent</i>
A+	90 – 100%	
A	80 – 89%	4.00
B	70 - 79%	3.00
C	60 - 69%	2.00
D	50 – 59%	1.00
F (Fail)	49% and below	0.00
CR (Credit)	Credit for diploma requirements has been awarded.	
S	Satisfactory achievement in field /clinical placement or non-graded subject area.	
U	Unsatisfactory achievement in field/clinical placement or non-graded subject area.	
X	A temporary grade limited to situations with extenuating circumstances giving a student additional time to complete the requirements for a course.	
NR	Grade not reported to Registrar's office.	
W	Student has withdrawn from the course without academic penalty.	

VI. SPECIAL NOTES:Special Needs:

If you are a student with special needs (e.g. physical limitations, visual impairments, hearing impairments, or learning disabilities), you are encouraged to discuss required accommodations with your professor and/or the Special Needs office. Visit Room E1101 or call Extension 2703 so that support services can be arranged for you.

Retention of Course Outlines:

It is the responsibility of the student to retain all course outlines for possible future use in acquiring advanced standing at other postsecondary institutions.

Communication:

The College considers **LMS** as the primary channel of communication for each course. Regularly checking this software platform is critical as it will keep you directly connected with faculty and current course information. Success in this course may be directly related to your willingness to take advantage of the **Learning Management System** communication tool.

Plagiarism:

Students should refer to the definition of “academic dishonesty” in *Student Code of Conduct*. Students who engage in academic dishonesty will receive an automatic failure for that submission and/or such other penalty, up to and including expulsion from the course/program, as may be decided by the professor/dean. In order to protect students from inadvertent plagiarism, to protect the copyright of the material referenced, and to credit the author of the material, it is the policy of the department to employ a documentation format for referencing source material.

Course Outline Amendments:

The professor reserves the right to change the information contained in this course outline depending on the needs of the learner and the availability of resources.

Substitute course information is available in the Registrar's office.

VII. PRIOR LEARNING ASSESSMENT:

Students who wish to apply for advance credit transfer (advanced standing) should obtain an Application for Advance Credit from the program coordinator (or the course coordinator regarding a general education transfer request) or academic assistant. Students will be required to provide an unofficial transcript and course outline related to the course in question.

Credit for prior learning will also be given upon successful completion of a challenge exam or portfolio.

Specific Class Information

Assignments:

- Major assignments (5% or more) must be submitted on the due date, at the beginning of class, unless otherwise specified by the instructor. If major assignments are late, both the following steps must be taken in order for the assignment to be evaluated;
 1. Major assignments that are late are to be handed in to Room E3209 (slip under the door).
 2. The instructor will be notified, through LMS, that the assignment has been handed in. An attachment (in Microsoft Word format) of the completed assignment must be included. A reply will be sent back to you indicating that the material has been received.
- Late, major assignments **will be deducted 5% per day** (20% maximum deduction). Major assignments, **more than one week late, will not be accepted.**
- All assignments are to be typed unless otherwise stated. All ideas and direct quotations must be documented using APA style. Please refer to the section above about Plagiarism.
- In-class or weekly assignments are due on the assigned date. These assignments will not be accepted after that date, as they are a part of class work and discussions.
- Students are responsible for retaining a file of all drafts and returned assignments. Students should keep their computer file of assignments until the end of semester. In the event of a grade dispute, students must produce the graded assignment, so it can be recorded.
- Students must adhere to dates set for oral presentations unless the professor has approved prior arrangements. Students who do not present on their presentation date will forfeit the mark for that assignment.
- Requests for extensions due to illness or extenuating circumstances must be made before the assignment due date.

Tests/Quizzes:

- Tests/Quizzes must be completed on the date scheduled. If students are unable to attend **due to illness or extenuating circumstances**, contact the professor prior to the start of the test. An alternative date must be arranged before the next class.

Learning Environment:

In the interest of providing an optimal learning environment, students are to follow these expectations;

- Students should be aware that the expectations for their conduct in class are outlined in the *Student Code of Conduct*
- Late students are expected to quietly enter the classroom and sit in the nearest seat available. Have your notes and writing material ready before you enter class. If assignments and activities have begun, please wait until they are completed. Wait until after class to speak to classmates about missed material.
- Students are to keep private conversations out of the classroom.

Missed Classes

- If a student misses a class, it is their responsibility to ask a classmate to take notes and pick up assignments and handouts.