Course # CDEC 2307

TRINITY VALLEY COMMUNITY COLLEGE
ADMINISTRATIVE-MASTER SYLLABUS

The Administrative- Master Syllabus is an administrative tool; it is **not intended to be distributed to students.** It is the intention of this Administrative-Master Syllabus to provide a general description of the course, outline the required elements of the course and to lay the foundation for course assessment for the improvement of student learning, as specified by the faculty of TVCC, regardless of who teaches the course, the timeframe by which it is instructed, or the instructional method by which the course is delivered. It is not intended to restrict the manner by which an individual faculty member teaches the course but to be an administrative tool to aid in the improvement of instruction. The Administrative-Master Syllabus will demonstrate that there is consistency and comparability in course offerings.

Course Title

Math and Science for Early Childhood Education

Course Prefix and Number

CDEC 2307

Department – Division

Education/Business & Computer Science

Course Type – select from one of the following categories.

☐ - **Academic General Education Course** (from ACGM – but not in TVCC Core)

☐ - **Academic TVCC Core Course**

x - **WECM Courses**

Semester Credit Hours: Lecture Hours: Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
3	3	0

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description

An exploration of principles, methods and materials for teaching young children math and science concepts through discovery and play.

Prerequisites/co requisites

None

Topical Outline

1. The Process of Inquiry into Math, Science and Technology
2. The Thinking of the Young Child
3. Socially Shared Learning
4. Learning to Look, Listen, and Respond
5. Exploring
6. Identifying Materials and Processes
7. Classifying, Comparing, and Contrasting
8. Hypothesizing and Generalizing
9. Communicating Results
10. Number Sense in Math
11. Technology in the Classroom
12. Approaches to Curriculum
13. Environments
14. Exploring Basic Math and Number Sense
15. Exploring Math in Shape, Space, and Time
16. Exploring Physical Science
17. Exploring Earth Science
18. Exploring Life Science: Plants
19. Exploring Life Science: Animals
20. Inquiry as an Approach to Life

Course Learning Outcomes

1. To acquire an understanding of cognitive skills as they apply to math and science in young children.
2. To create developmentally appropriate curriculum for math and science.
3. To develop skills and tools to evaluate the learning needs of children in math and science.
4. To solve problems within the early childhood environment to assure that children's needs are met in the learning areas of math and science.

Relationship to General Education Outcomes – In addition to the core competencies, Trinity Valley Community College has established ten general education goals which specify knowledge and skills that students should gain from completing courses in the various component areas of the core curriculum. Information regarding curriculum and assessment as a means for the improvement of student learning through the general education component. (Select all that apply.)

Mark with an "X"	General Education Outcome
x	A. To communicate clearly and effectively in both oral and written English.
x	B. To improve reading skills focused on comprehending, analyzing, interpreting, and evaluating printed materials.

	C. To understand mathematical information and utilize mathematical skills.
	D. To demonstrate qualitative and quantitative critical thinking skills.
	E. To understand and appreciate cultural and ethnic diversity.
	F. To utilize computer based technology in accessing information, solving problems, and communicating.
	G. To recognize and evaluate artistic achievements in the visual and performing arts.
	H. To improve basic understanding of political, economic, and social systems.
	I. To demonstrate knowledge of the physical universe and living systems.
x	J. To develop skills and strategies to become an engaged learner.

Required Text(s)

Inquiry Into Math, Science & Technology for Teaching Young Children by Prairie
Current edition

Optional Text(s)

Material/Technology to be supplied by the student.

Course Requirements/Grading System – describe any course specific requirements such as research papers or reading assignments and the generalized grading format for the course; not intended to restrict the individual nature by which each faculty member who teaches the course determines course requirements and final student performance, but should offer consistency within reason for all sections taught for those departments without a standardized format.

The course grade will be an average of class participation grades, outside research and report grades, pop-quizzes, three regular tests and a final exam. The final course grade will be determined using the following scale:

- 100-90 A
- 89-80 B
- 79-70 C
- 69-60 D
- 59 or below F

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by	Signature	Date
Department Head	Signature	Date
Division Chair	Signature	Date
Vice President	Signature	Date