### SYLLABUS PART I

# EDISON COMMUNITY COLLEGE ECE 212S COGNITIVE DEVELOPMENT 4 CREDIT HOURS

### COURSE DESCRIPTION:

In-depth study of cognitive development of children ages birth through age eight. Includes brain development, cognitive development theories, multiple intelligences, problem solving; and planning, implementing, and evaluating appropriate activities in math, science, and social studies. The Ohio Department of Education Early Learning Content Standards are also included. Weekly participation in an early childhood program is required. Recommended preparation: ECE 115S, ECE 124S and ECE 125S. Lab fee.

### **COURSE GOALS**

### The student will:

Bloom's			Program
Level			Outcomes
3	1.	Demonstrate understanding of brain development in young children.	1
2	2.	Explain the scientific method and how it relates to problem solving skills in young children.	1, 21
3	3.	Apply theoretical concepts and stages of learning to the math, science, and social studies curricula.	1, 2, 3, 21
3	4.	Define and demonstrate basic key concepts and vocabulary in math, science, and social studies.	13, 21
5	5.	Plan, prepare, and implement activities and learning centers that encourage cognitive growth in young children while also meeting the Ohio Early Learning Content Standards for math, science, and social studies.	1, 2, 3, 7, 8, 11, 12, 13, 14
3	6.	Demonstrate techniques that expand math, science, and social studies across the preschool curriculum.	1, 2, 3, 7, 8, 11, 12, 13, 14
3	7.	Apply multiple intelligences theories to activities with children.	1, 2, 3, 7, 8, 11, 12, 13, 14
1	8.	Identify techniques that will involve and/or keep informed parents and families in the activities that encourage cognitive growth in young children.	7, 8
1	9.	Identify materials and resources available and appropriate to use in activities that promote cognitive growth in young children.	1, 2, 14, 24
2	10.	Observe and participate in preschool, Kindergarten and child care settings	1, 8, 15, 16, 17, 18, 20, 22, 23
5	11.	Create appropriate materials to use in math, science and social studies activities.	1, 2, 3, 14, 24
3	12.	Demonstrate the practice of anti-bias measures in reviewing all materials and resources.	2, 14, 23, 24

## **CORE VALUES**

The Core Values are a set of principles which guide in creating educational programs and environments at Edison. They include communication, ethics, critical thinking, human diversity, inquiry/respect for

learning, and interpersonal skills/teamwork. The goals, objectives, and activities in this course will introduce/reinforce these Core Values whenever appropriate.

#### TOPIC OUTLINE

- 1. Brain Development in the Young Child
- 2. How a Child Thinks: Piaget and Vygotsky
- 3. Multiple Intelligences
- 4. Concept Formation in the Social Studies
- 5. Concept Formation in Science and Math
- 6. Applying Fundamental Concepts in Math and Science
- 7. Symbols and Higher Level Activities
- 8. Ohio Content Standards in Math, Science and Social Studies
- 9. Materials and Resources for Math, Science and Social Studies
- 10. Math, Science and Social Studies in the Home
- 11. Extending Concepts with Children's Literature
- 12. Putting It All Together

### **TEXTS AND MANUALS**

Charlesworth, Rosalind and Karen K. Lind. Math & Science for Young Children 5<sup>th</sup> Edition. Delmar Publishers

Dodge, Diane Trister and Laura J. Colker. Creative Curriculum. Third Edition, Washington D.D., Teaching Strategies.