COURSE INFORMATION

TITLE: ECEM 130 Teaching Math to Young Children

QUARTER: Spring 2009 (4/7/09 through 6/24/09)

ITEM NUMBER: 3615 Section 1 -- 5 credits

INSTRUCTORS: William Bricken and Julie Bricken

EMAIL: william.bricken@lwtc.edu

PHONE: 425-739-8289

OFFICE LOCATION: T-420

OFFICE HOURS: one hour prior to class and after class

CLASS HOURS: Monday and Wednesday, 5:30pm - 7:50pm

CLASS LOCATION: S-8 on Mondays, T-413 (MathLab) on Wednesdays

COURSE DESCRIPTION:

Teaching Math to Young Children provides the necessary tools and knowledge for successful teaching of mathematics to preschool children ages 2 through 6. Teachers will learn how to play with the mathematical ideas that define the content standards for preschool mathematical skills: number and operations; patterns, functions and relations; geometry and measurement; and problem solving and data analysis. This hands-on course covers a diversity of math activities, including pattern blocks, art, virtual manipulatives, cooking, inside and outside games, math problems, and group activities.

TEXTBOOK: to be decided

REQUIRED TOOLS:
a basic hand-calculator, assess to the Internet, email address.

COURSE OBJECTIVES

The primary goal of this course is for each student to understand and practice the techniques and strategies used to teach math to young children. Topics to be covered include:

sorting and classification	(sets)
how numbers work	(arithmetic)
time and quantity	(measurement)
patterns and relationships	(algebra)
spatial concepts	(geometry)
gathering and analyzing	(data)

Processes and teaching methods include:

problem solving and reasoning
consolidating understanding through communication
a diversity of math representations, perspectives, and modalities
approaching math as a unified whole.

The overall goal of the course is to improve mathematical communication.

METHODS OF INSTRUCTION

This course emphasizes group work, discussion, exploration and direct experience. Class will begin with questions, observations and shared experiences that arise from prior classes. Then the instructors will present a brief content lecture designed to encourage dialog, discussion, and digression. The rest of the class time will be spent exploring resources, activities and methods associated with successful teaching of math to young children. Some class time will be spent using internet resources. The instructors will provide individual feedback, focus, and guidance to each student.

PERFORMANCE EVALUATION

Performance evaluation will be decided by the class as a whole during the first week. Criterion-referenced and student-centered evaluation will be emphasized.

GRADING

Letter grades will be associated with class participation and contributions. Details of grading will be determined by the class as a whole.

A	(3.7 - 4.0) --	complete all projects and assignments
B	(2.7 - 3.6) --	complete most projects and assignments
C	(1.7 - 2.6) --	complete several projects and assignments
D/F	(0.0 - 1.6) --	failure to complete several projects and assignments

Decimal grades depend upon effort, performance, understanding, and growth, and will be determined by mutual discussion between student and instructors.

COURSE POLICIES AND PROCEDURES

Managed Attendance

Students are expected to attend all class sessions. Attendance in class is valuable for several reasons:

- -- Students are informed of scheduling and administration of the course.
- -- Lectures by the instructors provide context, information, techniques, and alternatives for successful completion of course content.
- -- Students can discuss questions and difficulties with the instructors and with others in the class.
- -- Peer teaching and learning permits each student to share experiences with other students in a supportive environment.
- -- The instructors can provide personalized guidance and suggestions about important mathematical ideas, about methods of teaching, and about available resources.

Plagiarism

Students are expected to follow the college student conduct code, WAC 495D-120, which prohibits cheating and plagiarism. Although teamwork and peer interaction is encouraged while learning the course content, test performance is individual.

Disability Services

Students requesting academic accommodations should contact Disability Support Services in person, by phone (425-739-8204), or by email.

Classroom Conduct

The classroom is a social environment with expectations regarding courtesy, safety, eating, sleeping, sexual harassment, and use of electronic devices such as computers, cell phones, iPods, and pagers. Policies regarding appropriate classroom conduct will be discussed and decided by the class as a whole.

Responsibility for Learning

Students are expected to take responsibility for their own learning, to be sufficiently motivated to complete all course activities, and to seek out effective individual learning aids, such as web-based instructional tools.

Support Systems

Many excellent web-based summaries and tutorials are also available online. Personal tutoring is available in the ASC, Room T-217 in the Library.