Math 2130: Mathematics for Early Childhood Teachers
3 Credit Hours
Bowling Green State University

COURSE DESCRIPTION/COURSE AIM
In this course, you will be exploring and analyzing topics and concepts related to number and operations, geometry, and measurement, that will be important to you in your role as an early childhood teacher and/or intervention specialist. The aim of this course is for you to not only develop deeper understanding of the mathematical topics, but for you to gain insight into how children understand mathematics and to experience active learning strategies that support reasoning and sense making about mathematics.

COURSE DELIVERY/INSTRUCTIONAL STRATEGIES
Research shows that students in mathematics classrooms experience more success when a variety of approaches are used to study mathematics. In Math 2130, we'll explore mathematics concepts with group activities, discussions, interactive lectures, and writing assignments. In this class, it isn't possible to sit passively while you are told what you need to know. You will need to be actively thinking about mathematics and be prepared to explain these thoughts to your small group and to the class.

REQUIRED RESOURCES/TEXTS
Mathematics for Elementary Teachers with Activities, 4th edition, Sybilla Beckmann, Pearson, 2014. *Registration in the MyMathLab course for this class is required.*   This registration provides students with access to the MyMathLab online homework system and course resources as well as access to an electronic version of the textbook and student activities manual. Paper copies of activities used in class will be provided as needed. MyMathLab registration information is available on Canvas. (*Note: Purchasing a hard copy of the textbook and/or student activities manual is optional*.)

ATTENDANCE, PARTICIPATION, & INTERACTION REQUIREMENTS
Each student is expected to attend every class meeting and be well prepared to participate fully in the day's activities. It is expected that students will be engaged in learning and give their full attention to class activities and discussions at all times.

EVALUATION TECHNIQUES
Tests/Exams– Students will complete three in-class written tests and a common comprehensive final exam.
Modeling Assessment – Students will complete a modeling assessment by appointment outside of class time. This assessment will require students to demonstrate understanding of numbers and operations through modeling problems using hands-on manipulatives.
MyMathLab Homework – Students will complete MyMathLab (MML) homework assignments for each topic/chapter.
Written Assignments/Quizzes – Students may be expected to complete written homework assignments, small group summaries, exit slips, article responses, and/or quizzes.

GRADING

MML Homework	5%
Attendance, Assignments, Quizzes	5%
Test 1	20%
Test 2	20%
Test 3	20%
Modeling Assessment	10%
Final Exam	20%

A = 90–100%   B = 80–<90%   C = 70–<80%   D = 60–<70%   F = <60%

MAKE-UP AND LATE ASSIGNMENT/EXAM POLICY
Unless prior arrangements have been made, assignments will not be accepted after the due date, and quizzes and tests cannot be made up. Please contact your instructor as soon as possible if you have an illness or emergency that prevents you from attending class or completing an assignment on time.

COURSE CALENDAR

	Monday	Wednesday	Friday
Week 1	Attributes of Shapes (10.5)	Triangles and Quadrilaterals (10.5)	Relationships and Venn Diagrams (10.5)
Week 2	Symmetry (14.2)	Circles and Spheres (10.4)	Solid Shapes (13.1)
Week 3	Counting and Numeration (1.1)	Place Value (1.1-1.2)	Number Lines (1.1-1.2)
Week 4	Comparing Base Ten Numbers (1.2-1.3)	Rounding Decimals (1.4)	Fractions (2.2)
Week 5	Fractions (2.2)	**Test 1** (10.5, 14.2, 10.4, 13.1, 1.1-1.4)	Equivalent Fractions (2.2-2.3)
Week 6	Common Denominators (2.3)	Comparing Fractions (2.4)	Addition and Subtraction (3.1)
Week 7	Addition and Subtraction (3.1)	Addition and Subtraction Strategies (3.2)	Addition and Subtraction Algorithms (3.3)
Week 8	Adding and Subtracting Fractions (3.4)	Adding and Subtracting Fractions (3.4)	Multiplication (4.1)
Week 9	Multiplication Properties and Strategies (4.3-4.4)	**Test 2** (2.2-2.4, 3.1-3.4)	Multiplication Algorithms (4.6)
Week 10	Fraction Multiplication (5.1)	Division (6.1)	Division (6.1-6.2)
Week 11	Division Algorithms (6.3)	Division Algorithms (6.3)	Fraction Division (6.4)
Week 12	Proportional Reasoning (7.1-7.2)	Proportional Reasoning (7.1-7.2)	Measurement and Units of Measure (11.1)
Week 13	Measurement and Units of Measure (11.1, 11.4)	**Test 3** (4.1-4.6, 5.1, 6.1-6.4, 7.1-7.2)	Modeling Assessment Practice
Week 14	**Modeling Assessment by appointment**		
	Measurement and Dimension (11.1-11.2)	Units of Measure (11.4)	Area (12.1-12.2)
Week 15	Area (12.2) Perimeter and Area (12.8)	Surface Area and Volume (13.2-13.3)	Review and Reflection

UNIVERSITY POLICIES

Dropping the Course: During the fall and spring semesters, a student may enroll in a course within seven calendar days from the beginning of classes; fourteen calendar days are allowed for a student to change the grading option without college approval or to drop a course with no record on the transcript.   A grade of "W" is given if a student formally withdraws from a course after the drop deadline (see Drop/Add Policy) but before the end of the 12th week of a course in a 15-week session. The student is responsible for filing a course withdrawal request that also notifies the instructor (Withdrawal form) on or before the last day of the 12th week (http://www.bgsu.edu/catalog/Acad_policies/Acad_policies15.html).

Codes of Conduct and Academic Honesty Policy: The instructor and students in this course will adhere to the University's general Codes of Conduct defined in the *BGSU Student Handbook*. The Code of Academic Conduct (Academic Honesty Policy) requires that students do not engage in academic dishonesty. For details, refer to:

- *BGSU Student Handbook* (http://www.bgsu.edu/content/dam/BGSU/student-affairs/Student-Conduct/documents/Student-Handbook.pdf)
- *The Academic Charter*, B.II.H (http://www.bgsu.edu/content/dam/BGSU/faculty-senate/documents/academic-charter/searchable-academic-charter.pdf)

Disability Policy: In accordance with the University policy, if the student has a documented disability and requires accommodations to obtain equal access in this course, he or she should contact the instructor at the beginning of the semester and make this need known. Students with disabilities must verify their eligibility through the Office of Accessibility Services, 38 College Park Office Building, 419-372-8495 (phone), 419-372-8496 (fax). (http://www.bgsu.edu/disability-services.html)

Student veteran-friendly campus: BGSU educators recognize student veterans' rights when entering and exiting the university system. If you are a student veteran, please communicate with your instructor so reasonable accommodations can be made for absence when drilling or being called to active duty (See http://www.bgsu.edu/veteran/ for more information).

University Closure: In most cases, the University will not close for winter conditions unless the Wood County Sheriff's Department declares a Level 3 emergency.   Information about University wide closures is communicated by the Office of Marketing and Communications, which will notify the University Fact Line, local FM & AM radio stations and the four Toledo television stations. For changes in individual class meetings, please refer to the class Canvas site for postings by the instructor.