



Graduate Course Syllabus

EDU-503: Methods of Teaching Elementary Mathematics

Center: Online

Course Prerequisites

Passing Scores on Praxis II mathematics section or current teaching certification.

Course Description

This course focuses on the concepts of mathematics that are taught in grades K-6 and the current methods of teaching that content, including experience with manipulative materials.

Course Outcomes

- Identify characteristics of developmentally appropriate mathematics (CO 1)
- Develop learning activities in mathematics based on academic standards (CO 2)
- Create and demonstrate a lesson plan using the constructivist approach to learning mathematics (CO 3)
- Use diagnostic assessments to inform, design, and implement instruction (CO 4)
- Engage families by providing resources that enable them to support their child's learning in mathematics (CO 5)
- Use a variety of manipulatives to model mathematical concepts and operations (CO 6)
- Incorporate the use of children's literature in mathematics instruction (CO 7)
- Demonstrate effective strategies for mathematical concepts and operations. (CO8)

Required Materials

Using your learning resources is critical to your success in this course. Please purchase directly through SNHU's online bookstore, [MBS Direct](#), rather than any other vendor. Purchasing directly from the bookstore ensures that you will obtain the correct materials and that the Help Desk, your advisor, and the instructor can provide you with support if you have problems.

License for Chalk and Wire ePortfolio

- Van de Walle, John A. (2013). Elementary and Middle School Mathematics Teaching Developmentally. Eighth Edition. ISBN-13: 978-0-13-261226-5.
- Uncovering Student Thinking in Mathematics, Grades K-5, Tobey ISBN 13: 978-1-4129-8055-5
- SNHU Math Manipulative Tool Kit



Instructor Availability and Response Time

Your class interaction with your instructor and your classmates will take place in Blackboard on a regular, ongoing basis. Your instructor will be active in Blackboard at least five days a week and you will normally communicate with your instructor in the open Blackboard discussion forum so that your questions and the instructor's answers benefit the entire class. You should send emails directly to your instructor only when you need to discuss something of a personal or sensitive nature, and in those cases your instructor will generally provide a response within 24 hours.

Grade Distribution

Assignment Category	Number of Graded Items	Point Value per Item	Total Points
Discussions	5	35	175
Blogs	5	25	125
Journals	1 (5 entries)	85	85
Wiki	1	25	25
Presentations	2	40	80
Short Papers	2	35	70
Lesson Plans	1	40	40
Critical Task Milestones	4	50	200
Critical Task Final Submission	1	200	200
		Total Course Points:	1,000



University Grading System: Graduate

<i>Total Points. 0</i>				
Grade	Numerical Equivalent	Points	Points Equivalent	
			<i>Lower</i>	<i>Upper</i>
A	93-100	4.00	0	0
A-	90-92	3.67	0	-1
B+	87-89	3.33	0	-1
B	83-86	3.00	0	-1
B-	80-82	2.67	0	-1
C+	77-79	2.33	0	-1
C	73-76	2.00	0	-1
F	0-72	0.00	0	-1
I	Incomplete			
IF	Incomplete/Failure*			
W	Withdrawn			

*Incomplete and Incomplete/Failure: Any student requesting an "I" grade must complete a Student Petition and Contract for a Grade of Incomplete and submit it to the proper offices prior to the final day of the term/semester. The petition will specify a deadline by which the coursework must be completed. The incomplete automatically becomes an "IF" if work has not been completed and a grade has not been submitted by the specific deadline.

Grading Guides

Specific activity directions, grading guides, posting requirements, and additional deadlines can be found in the Course Information area in the Assignment Guidelines and Rubrics folder.

Chalk & Wire

For students earning certification they will have to submit assignments to [Chalk & Wire](#). Note, to use the link, you must be signed into mySNHU.

For additional information, please review the [Quick Start guide](#), how to [create a School of Education Module 1 portfolio](#), and how to [submit a critical task or developmental capture to the Module 1 portfolio](#). A [full list of Chalk & Wire help documents](#) is also available on the School of Education site. In module five you will submit the Lesson Plan into Chalk and Wire under EDU 503- Lesson Plan, in module seven you will submit your Field Experience Reflection under EDU 503 Field Experience (10 hours) in Chalk & Wire, and in module nine you will submit your final project under Formative Assessment Probe.



Weekly Assignment Schedule

The Learning Modules area in Blackboard contains one module folder for each week of the course. All reading and assignment information can be found in the folders. All assignments are due by 11:59 p.m. Eastern Time on the last day of the module week.

In addition to the textbook readings that are listed, there may be additional required resources within each module in Blackboard.

Module	Topics and Assignments
1	Constructivism in Mathematics <i>Elementary and Middle School Mathematics: Teaching Developmentally</i> , chapters 1 & 2 1-1- Discussion Board- Common Core and Mathematics 1-2- Short Paper- Article Review 1-3- Review Critical Task or Alternative Assignment
2	Planning in the Problem-Based Classroom and Math Tools <i>Elementary and Middle School Mathematics: Teaching Developmentally</i> , chapters 3 & 4 2-1- Problem Based Planning & Using Manipulatives Blog 2-2- Presentation on Manipulatives 2-3- Critical Task Continued Work
3	Using Formative Assessments & Differentiation <i>Elementary and Middle School Mathematics: Teaching Developmentally</i> , chapters 5 & 6 <i>Uncovering Student Thinking in Mathematics Grades K-5</i> , Chapters 1 & 2 3-1- Discussion Board on Formative Assessment Probes 3-2- Short Paper on Differentiation and Assessment 3-3- Milestone One Quest Report - Submit into Blackboard
4	Number Sense, Measurement & Literature <i>Elementary and Middle School Mathematics: Teaching Developmentally</i> , chapters 8 & 19 4-1- Blog on Early Number Sense 4-2- Wiki on Measurement & Literature 4-3 Literature Lesson Plan
5	Base Ten Concepts and Place Value <i>Elementary and Middle School Mathematics: Teaching Developmentally</i> , chapter 11 & pages 247-255 5-1- Discussion Board on Base-Ten Concepts 5-2- Math Journal Base Ten Activity

	<p>5-3 - Milestone Two Lesson Plan Based on the Formative Assessment Probe- Submit into Blackboard</p> <p>5-4- Submit Lesson Plan into Chalk and Wire</p>
6	<p>Meaning of Operations & Fact Fluency</p> <p><i>Elementary and Middle School Mathematics: Teaching Developmentally</i>, chapters 9 & 10</p> <p>6-1- Presentation on Meanings of Operations</p> <p>6-2- Blog on Family Math Night</p> <p>6-3 Continued Work on Critical Task</p>
7	<p>Whole Number Computation & Computational Estimation</p> <p><i>Elementary and Middle School Mathematics: Teaching Developmentally</i>, chapters 12 & 13</p> <p>7-1- Discussion Board on Computation Strategies</p> <p>7-2- Math Journal Computation Activity</p> <p>-3 - Milestone Three Field Experience Reflection submit into Blackboard</p> <p>7-4- Chalk & Wire- Submit your Field Experience Reflection</p>
8	<p>Algebraic and Geometric Thinking Concepts</p> <p><i>Elementary and Middle School Mathematics: Teaching Developmentally</i>, chapters 14, 20, & 23</p> <p>8-1- Blog with Webquest</p> <p>8-2- Math Journal- Geometry Activity</p> <p>8-3-Submit Milestone Four into Blackboard</p>
9	<p>Fractions, Decimals, & Percents</p> <p><i>Elementary and Middle School Mathematics: Teaching Developmentally</i>, chapters 15, 16, & 17</p> <p>9-1- Discussion Board on Fractions, Decimals & Percents</p> <p>9-2- Math Journal- Fractions Activity</p> <p>9-3 - Submit Final Project in Blackboard</p> <p>9-4- Chalk & Wire- Submit your Final Project</p>
10	<p>Data Analysis & Probability</p> <p><i>Elementary and Middle School Mathematics: Teaching Developmentally</i>, Chapters 21 & 22</p> <p>10-1- Blog on Statistics & Probability</p> <p>10-2- Math Journal- Data Analysis Activity</p>

Attendance Policy

Online students are required to post to the Blackboard discussion board during the first week of class. If a student does not submit a posting to the discussion board during the first week of class, the student is automatically withdrawn from the course for non-participation. Review the [full attendance policy](#).



Late Assignments Policy

Meeting assigned due dates is critical for demonstrating progress and ensuring appropriate time for instructor feedback on assignments. Students are expected to submit their assignments on or before the due date. Review the [full late assignment policy](#).

SNHU College of Online and Continuing Education Guide to Student Success

Review the [guide to student success](#).

Diversity and Disability Statement

The College of Online and Continuing Education (COCE) at SNHU values diversity and inclusion. SNHU strives to create inclusive and welcoming academic environments. If there are aspects of the instruction or design of this course that present barriers to your inclusion, please notify the Disability Resource Center (DRC) as soon as possible. We will work with you and your instructor to address needs and concerns.

We encourage all students with known or suspected physical, medical, sensory, psychiatric, and/or learning disabilities to register with the Disability Resource Center (DRC) in order to assess learning needs and take advantage of available academic accommodations and support services. We look forward to hearing from you. Our contact information is below.

Disability Resource Center (DRC)

(877) 591-4723 (select option 4)

(877) 520-8916 (fax)

drc@snhu.edu

We welcome COCE students, faculty, and staff to consult with the Disability Resource Center (DRC) on disability-related questions or concerns.

Academic Honesty Policy

Southern New Hampshire University requires all students to adhere to high standards of integrity in their academic work. Activities such as plagiarism and cheating are not condoned by the university. Review the [full academic honesty policy](#).

Copyright Policy

Southern New Hampshire University abides by the provisions of United States Copyright Act (Title 17 of the United States Code). Any person who infringes the copyright law is liable. Review the [full copyright policy](#).

SNHU College of Online and Continuing Education Withdrawal Policy

Review the [full withdrawal policy](#).

**Southern New Hampshire University Policies**

More information about SNHU policies can be found on the [policy page](#).