

Creating Differentiated Math Lessons for Elementary Education
Sloan Course – 15 hours

<i>Learning Outcomes</i>	<i>Activities</i>	<i>Assessment</i>	<i>Standard</i>	<i>Time</i>
Participants will introduce themselves and learn the course outline and expectations	Read the course syllabus, roadmap and policies Introduce yourself through an electronic name badge	Post in "I Have Read It" Take a personal survey and post responses in "Electronic Name Badge"	N/A	.5 hr
Participants will learn the on-line program Participants will define and describe the NYS Standards	Participants will practice Wimba Interactive discussion with Instructor using the Wimba voice tool Discussion on the New NYS Math Standards Web Site for the New Mathematics Core Curriculum and Standards www.emsc.nysed.gov/3-8/mathcore.doc	Log in during office hours Or Post answers to discussion questions	Standard 2 Information Systems MST 3	1.5 hr
Participants will explore differentiated math instruction and gain an in-depth understanding	View the documents presented on math differentiation. List three elements that jumped out at you and why? Read: "Differentiating in Math Classrooms" www.gp.k12.mi.us/ci/depts/math/differentk5.htm What two alternative assessments suggested in the article would you like to try in the classroom? Explain why?	Post responses in "Math Talk"	MST 3 ELA1	1 hr
Participants will learn different implementation methods and learn the role of on-going assessment	Read: "Differentiated Instruction for Math, How it is Implemented?" http://www.k8accesscenter.org/math/differentiation.asp Choose one of the implementation strategies, analyze it, and try to apply in your math classroom. Write a summary of your application. Report back. Respond to another participant's strategy using focused comments and questions	Post in "Readiness for Math"	MST 3 Process Strands ELA 1	2 hr

Participants will examine a variety of research-based proven instructional strategies that support differentiation	<p>Examine different strategies, surveys, and checklists that support a differentiated math classroom. Using the access center web site again, read "What Does It Look Like for Math?"</p> <p>Also www.adifferentplace.org/differentiated.htm Is very useful</p> <p>What strategies would you use in your math classroom? Explain how you would use them to help your students acquire the same core content concepts and skills while varying instruction based on prior knowledge and readiness</p>	Post your strategies	MST 3 Content and Process Strands	1 hr
Participants will create a differentiated lesson using the strategy, Tiered Assignments	<p>View a written model of a tiered lesson, "Painting a Rock Wall" (Algebra Strand: 4.A.5)</p> <p>Design a tiered lesson using the same criteria, Concept/Strand, Skills, Materials, Introduction, Goal, Three Tiers, and Closing Be sure to align to the NYS Standards Develop authentic entry and exit skills in lesson</p>	<p>Lesson will be posted in "Tiers"</p> <p>Respond to another participant's lesson</p>	MST 3 Content and process Strands	2 hrs
Participants will learn the three-step process of compacting to allow students to work on skills appropriate to their readiness level	<p>Adjust your instruction to account for prior student mastery. First, assess students to determine level of knowledge, secondly, create plans for what student needs to know and excuse student if they already know content, thirdly, create plans for enriched study</p> <p>Come up with a lesson that you would compact. Ex. Identify parts of fractions</p>	Plans posted in appropriate area	MST 3	1 hr
Participants will apply Interest Centers or Interest Groups to their math instruction	<p>Using the knowledge you have gained in math differentiation set up interest centers or interest groups in your math classroom based on specific learner interest.</p> <p>What math skills did you focus on in your centers or what topic of interest did you focus on in your interest group? Explain your reasoning for your setup.</p>	Post your plan in the appropriate area	MST 3 Process and Content Strands	1 hr

Participants will experience differentiating instruction with learning contracts	<p>Set up a learning contract between one of your students and yourself. Focus the differentiation on readiness and learning profiles. Read: www.learning-styles-online.com</p> <p>Respond to another participant's contract offering positive comments</p>	Post in "Learning Contract"	MST 3	1 hrs
Participants will differentiate math instruction using choice boards	<p>Prepare choice boards for one or several of your students based on their interests and learning profiles. Show an example and highlight one student's learning profile.</p>	Post in "Choice Board"	MST 3	1 hr
Participants will incorporate time-saving management tips for the differentiated classroom.	<p>Here are two sites that have great tips for the classroom. Read: www.glencoe.com/sec/teachingtoday/weeklytips.phtml www.internet4classrooms.com/di.htm</p> <p>What are some of the tips you might incorporate in your instruction?</p>	Post in "Tips"	ELA 1, 2, and 3	1 hr
Participants will evaluate and discuss differentiated math Instruction	<p>You will meet in Elluminate and discuss what you have learned through this course. Some topics for discussion: Instructional strategies, management tips, learning standards, and student outcomes</p>	Meet in Elluminate for class discussion	ELA 4 MST 3	1.5 hrs
Participants will evaluate the course	<p>Provide a short reflection comparing how you previously taught math and how you may teach it now as a result of this course.</p> <p>Complete an online evaluation form</p>	Post in evaluation!	MST 3	.5 hr