

Spring Semester 2010  
Math 515 Math Manipulatives I

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Date	Topic		Additional Topics
1/25/09	Unifix Cubes		Private Universe Project in Mathematics (1)
2/1/09	Manipulative Games		Private Universe Project in Mathematics (2)
2/8/09	Pattern Blocks		Private Universe Project in Mathematics (3)
2/22/09	Pattern Blocks		Private Universe Project in Mathematics (4)
3/8/09	Color Tiles		Private Universe Project in Mathematics (5)
3/15/09	Color Tiles		Private Universe Project in Mathematics (6)
3/22/09	Cuisenaire Rods		
3/29/09	Cuisenaire Rods		
4/5/09	Geoboards		
4/12/09	Geoboards		
4/19/09	Tangrams		
4/26/09	Multi-link Cubes		
5/3/09	Algebra Tiles		
5/10/09	Algeblocks		

Students are required to complete the six video series entitled “Private Universe Project in Mathematics”, write a brief reaction to each video (1-2 pages) on each video according to the time line above, and be prepared to discuss the videos in class. (20% of grade)

Each week, students will be given materials and be required to develop a lesson at the age/grade level of their choice, which they will present to the class and observe/monitor the learning process as it takes place. In preparation, students should find a “willing” subject to whom they can present their lesson and write a summary/reflection on the experience (1-2 pages). Students will be given a CD containing possible lesson plans for each of the manipulatives that we will be working with. See ([http://www.etacuisenaire.com/supersource/supersource\\_cdrom.jsp](http://www.etacuisenaire.com/supersource/supersource_cdrom.jsp)). Please do not make copies of the disk or further distribute it. (40% of grade)

Finally, each week students will be required to learn/study/analyze and teach the class to use on of the Virtual Manipulatives available at the National Library of Virtual Manipulatives (see <http://nlvm.usu.edu/en/nav/vLibrary.html>). Students are required to write a summary/reflection/analysis (1-2 pages) of their experience with the Virtual Manipulative they are researching that week. (30% of grade)

There will be no final exam and grades will be based upon attendance (10% of grade) and completion of the above mentioned assignments.