

**STRUCTURES OF MATHEMATICS  
CALENDAR FOR FALL 2008  
DR. M. HERMAN, ROWAN UNIVERSITY**

AAM = Activity Approach Manual

MET = Mathematics for Elementary Teachers Textbook

<b>TUESDAY</b>	<b>THURSDAY</b>
<p><b>Sept 2</b> Introduction / Syllabus MET 1.1 Problem Solving Gauss Problems Stacking Cereal Boxes</p>	<p><b>Sept 4</b> MET 1.1/1.2 Patterns and Problem Solving AAM 1.2 Geometric Number Patterns with Color Tiles (p. 8-11, #1-6) AAM 1.2 Connections (p. 13-14, #3-4) MET Math Activity 1.3 (p. 36, #1-2)</p>
<p><b>Sept 9</b> MET 1.3 Problem Solving with Algebra AAM 4.1 Even and Odd Numbers (p. 77-81, #1-5) AAM 1.3 Solving Story Problems with Algebra Pieces (p. 15-17, #1,2,4,5,7,9) AAM 1.3 Connections (p. 19, #3-4)</p>	<p><b>Sept 11</b> MET 2.2 Functions, Coordinates, and Graphs AAM 2.2 Slopes and Linear Functions on Geoboards (p. 30-34, #1-8) AAM 2.2 Connections (p. 36, #5) MET Math Activity 2.2 (p. 77 #1, 3)</p>
<p><b>Sept 16</b> MET 7.1 Scatterplots AAM 7.1 Collecting and Graphing Data (p. 172-173, #7) AAM 7.1 Connections (p. 177-178, #2) M&amp;M's Activity</p>	<p><b>Sept 18</b> Families of Functions Painted Cubes (finite differences)</p>
<p><b>Sept 23</b> Base Bundles Sticks and Bundles Activity (Base Representation, Conversion, Addition, Subtraction)</p>	<p><b>Sept 25</b> Base Pieces (Units, Longs, Flats, Long-Flats, Flat-Flats) AAM 3.1 Models for Numeration with Multibase Pieces (p. 45-49, #1-7) AAM 3.1 Connections (p. 52, #3-5) MET Math Activity 3.1 (p. 124, #1-4)</p>
<p><b>Sept 30</b> Base Pieces (Units, Longs, Flats, Long-Flats, Flat-Flats) AAM 3.2 Adding and Subtracting with Multibase Pieces (p. 53-58, #3,4,7,8,9) AAM 3.2 Connections (p. 59, #3) MET Math Activity 3.2 (p. 142, #1-2)</p>	<p><b>Oct 2</b> Base Pieces Base Eleven and Base Twelve Base Ten Representations: Bundles, Blocks, DigiBlocks Place Value (<i>Using Language and Visualization to Teach Place Value</i> article)</p>
<p><b>Oct 7</b></p> <p style="font-size: 1.5em;"><b>EXAM 1</b></p>	<p><b>Oct 9</b> MET 3.2 Addition Models, Algorithms, Properties Partial Sums, Left-to-Right Addition, Scratch Method, Expanded, Opposite Change, Compensation methods for Addition</p>
<p><b>Oct 14</b> MET 3.2 Subtraction Models, Algorithms, Properties Take-Away, Comparison, Missing Addend, Compatible Numbers, Substitutions, Equal Differences, Add Up/Cashier's, Austrian methods for Subtraction Inverse operations</p>	<p><b>Oct 16</b> MET 3.3 Multiplication Models, Algorithms, Properties Partial Products, Compatible Numbers, Substitutions, Equal Products, Lattice, Rabdologia, Medieval, Russian Peasant methods for Multiplication</p>
<p><b>Oct 21</b> MET 3.3 Multiplication AAM 3.3 Multiplying with Base Ten Pieces (p. 60-63, #1-7) AAM 3.3 Connections in Base Five (p. 65, #3-4) MET Math Activity 3.3 in Base Five (p. 163, #1-3)</p>	<p><b>Oct 23</b> MET 3.4 Division Models, Algorithms, Properties Base pieces, Sharing/Partitive, Rectangular Array, Equal Quotients methods for Division, Measurement, Sharing, Rectangles, Remainders, Long Division AAM 3.4 Dividing with Base Ten Pieces (p. 66-72, #1-6)</p>

<b>TUESDAY</b>	<b>THURSDAY</b>
<p><b>Oct 28</b> MET 3.4 Division AAM 3.4 Connections (p. 74, #2) MET Math Activity 3.4 in Base Five (p. 186, #1-3)</p>	<p><b>Oct 30</b> MET 4.1 Factors and Multiples Sieve of Erathosthenes, Divisibility Rules, Chart of Facts about Factors AAM 4.1 Models for Factors and Primes (p. 81-83, #6-10) AAM 4.1 Connections (p. 85, #4) The Locker Problem</p>
<p><b>Nov 4</b> <b>NO ROWAN CLASSES (ELECTION DAY)</b></p>	<p><b>Nov 6</b> MET 4.2 GCF and LCM AAM 4.2 Models for GCF and LCM (p. 86-91, #1-9) AAM 4.2 Connections (p. 95, #3) GCF and LCM with Trains of Cuisenaire Rods</p>
<p><b>Nov 11</b> <b>EXAM 2</b></p>	<p><b>Nov 13</b> Rational Numbers Chart of Unit Fractions Terminating and Repeating Decimals Base Four Charts, Patterns, "Basimals"</p>
<p><b>Nov 18</b> Operations involving Fractions with Cuisenaire Rods Naming Addition, Subtraction Multiplication, Division</p>	<p><b>Nov 20</b> MET 5.2/5.3 Fraction Bar Models AAM 5.2 Equality and Inequality (p. 106-112, #2,7a,8) AAM 5.3 Addition, Subtraction, Multiplication, Division (p. 114-119, #1,3-7) AAM 5.2 Connections (p. 113, #1,3)</p>
<p><b>Nov 25</b> MET 6.1/6.2 Decimal Square Models AAM 6.1 Decimal Squares, Equality, Place Value, Inequality (p. 123-131, #1,2,3c-h,4,5a,6a-c,7) AAM 6.2 Addition, Subtraction, Multiplication, Division (p. 133-141, #1-10)</p>	<p><b>Nov 27</b> <b>NO ROWAN CLASSES (THANKSGIVING)</b></p>
<p><b>Dec 2</b> MET 6.1/6.2 Decimal Square Models AAM 6.1 Connections (p. 132, #1-3) AAM 6.2 Connections (p. 143, #1,3)  Decimals with Base Ten Blocks and DigiBlocks</p>	<p><b>Dec 4</b> MET 6.4 Irrational Numbers AAM 6.4 Constructing Irrational Numbers with Squares and Right Triangles (p. 153-158, #1-7) Construct segments that are <math>\sqrt{2}</math> cm, <math>\sqrt{13}</math> cm, and <math>\sqrt{7}</math> cm long Various Roots on Calculator (e.g., cube root) Approximating <math>\pi</math></p>
<p><b>Dec 9</b> MET 3.1 Numeration Systems Complex Number System and Properties Primitive, Chinese-Japanese, Roman, Greek Herodianic, Babylonian, Egyptian, Mayan, Hindu-Arabic Numeration Systems Numeration System Definitions</p>	<p><b>Dec 11</b> Wrap up Complex Number System and Properties</p>
<p><b>Dec 15-19</b> <b>Rowan University Final Exams Week</b> Note: The Final Exam in this course is scheduled as a two-hour time block by Rowan University and may very well meet at a different time and day than our regularly scheduled class meeting time.</p>	