MTH/SLS 218 Syllabus
Mathematics for Elementary School Teachers
With Activities
Text: Beckman, 5th Edition, 2017, Pearson. CSI Math Department 2017.   L Blois
Required materials include a Calculator, a Compass and a Straight Edge

Day	Section & Reading assignments in the in Text	Activities Practice HW Problems Problems
1a	10.1 Lines and Angles. Angles for intersecting and parallel lines (452)	Activities CA-201/1, 2, 3. CA-202/1, 2; **Practice (text):** 460/1, 3, 4; **HW (text):** 463/2, 4, 5
1b	10.1 Angle sum of a triangle.	Activities CA-203/1, 2, 3. CA-204/1. CA-205/3. CA-206/4, 6, 7. CA-207/1 to 4. **Practice** 461/5, 6, 7. **HW:** 463/9, 10.
2a	10.2 Angles and Phenomena in the world (466)	Activities CA-209: Calculating Earth's Circumference. **Practice** 468/1, 2 **HW:** 469/1ab, 4a-f, 5 (instructor may expand on the topic of seasons)
2b	10.3 Circles & Spheres (472)	**Practice** 475/1, 2, 4. **HW:** 476/1, 2, 3
	10.3 The Global Positioning System (GPS)	Activities CA-214. (GPS can be presented as a class demo with strings and/or with diagrams)
3a	10.4 Triangles, Quadrilaterals and other Polygons: Definitions, Relationships and Venn diagrams (477)	Activities CA-217. CA-218-219. CA-220-221. CA-222 **Practice** 484/1 to 4. **HW:** 487/1, 2, 3, 5abc, 8ab, 9, 16ab, 19a, 20ab
3b	10.6 Constructions with a compass and a straight edge	Activities CA-223/1, 2, 3. CA-224/4, 6, 7. **Practice** 484/5, 6, 7. **HW:** 487/5abc, 8ab, 9, 16ab, 19a, 20ab.
4ab	**4a Review 4b. Test 1**	
5a	11. Measurement (492) 11.1 Concepts of Measurement (493)	Activities **CA-230/1, 2, 4. CA-231/1, 2, 3.** **Practice** 503/1 to 4, 7, 8, 9. **HW:** 504/1 to 7
	11.2 Length, Area, Volume & Dimension (505)	Activities **CA-232/1, 2.** **Practice** 508/1abc, 2, 3. **HW:** 509/1, 3, 4, 7
	11.3 Error & Precision in Measurement (510)	Activities CA-233/1ab, 2**.** **Practice** 513/1, 2. **HW:** 513/1, 2, 3
5b	11.4 Converting from One Unit of Measurement to Another I (514)	Activities CA-234/1abc, 2. CA-235/1, 2, 3. **Practice** 518/1 to 4. **HW:** 521/1 to 6, 8, 9, 10, 11
	11.4 Converting from One Unit of Measurement to Another II	Activities CA-236/1, 2. CA-237/1 to 5. CA-238/1, 2. **Practice** 518/5, 6, 7. **HW:** 521/12, 13, 14, 16, 17, 21, 25
6a	12.3 Areas of Triangles (535)	Activities **CA-246/3, 4. CA-247/1 to 4** **Practice** 539/2, 4. **HW:** 542/2, 4, 5, 6, 8, 9, 10, 11, 13
6b	12.4 Areas of Parallelograms & Other Polygons (544)	Activities **CA-248/1, 2. CA-249:12H/1, 2;**

		Practice 546/1, 3. **HW:** 547/2, 3, 4abcd, 6, 7ab, 8.
7a	12.5 Shearing: Changing Shapes without Changing Area. Cavalieri's Principle (550).	𝔸𝕔𝕥𝕚𝕧𝕚𝕥𝕚𝕖𝕤 **CA-250/12J. CA-251/1, 2, 3.** **Practice** 551/1, 2. **HW:** 553/1, 2ab, 3ab, 4ab, 5abc, 6
7b	12.6 Areas of Circles and the Number Pi. (554)	𝔸𝕔𝕥𝕚𝕧𝕚𝕥𝕚𝕖𝕤 **CA-252:12L. CA-253:12N. CA-254/1.** **Practice** 558/1, 2, 4, 5 **HW:** 559/1, 2, 6, 8
8ab	**8a. Review 8b. Test 2**	
9a	12.9 Pythagorean Theorem; applications and proofs (570).	𝔸𝕔𝕥𝕚𝕧𝕚𝕥𝕚𝕖𝕤 **CA-261:12U. CA-262/1 ,4** **Practice** 560/1, 2, 3, 6 **HW:** 563/1, 3, 6.
9b	Include the proof with similar right triangles; and President James Garfield's Trapezoidal proof	
	13. Solid Shapes: Their Volume & Surface Area (580)	
	13.1 Polyhedra & Other Solid Shapes (581)	𝔸𝕔𝕥𝕚𝕧𝕚𝕥𝕚𝕖𝕤 **CA-265/1, 2; CA-267. Practice** 586/1 to 4. **HW:** 587/2, 3, 4.
10a	13.2 Patterns & Surface Area (589)	𝔸𝕔𝕥𝕚𝕧𝕚𝕥𝕚𝕖𝕤 **CA-269/13G:1, 2. CA-270/1, 2, 3, 4.** **Practice** 591/7, 8, 9, 10, 11. **HW:** Cylinder Area: 595/3ab, 13ab; Pyramid Area: 596/11, 12. 583/11, 12; Cone Area: 596/15ab, 16ab, 17, 20
10b	13.3 Volumes of Solid Shapes (597) (refer students to YouTube videos)	𝔸𝕔𝕥𝕚𝕧𝕚𝕥𝕚𝕖𝕤 **CA-275:13N/1, 2, 3. CA-277/2, 3.** **Practice** 603/2 to 7. **HW:** 604/2ab, 4ab, 5, 7, 8, 12ab, cone: (17*, 18ab, 22, 23ab, 24)
	13.4 Volumes of Submerged Objects (607)	𝔸𝕔𝕥𝕚𝕧𝕚𝕥𝕚𝕖𝕤 **CA-311/1, 2, 3.** **Practice** 608/1, 2ab, 3. **HW:** 609/1, 2, 3
11a	15. Statistics (673). 15.1 Formulating Statistical Questions, Gathering Data, Using Samples (674)	𝔸𝕔𝕥𝕚𝕧𝕚𝕥𝕚𝕖𝕤 **CA-309/abcde. CA-310/1, 2.** **Practice** 679/1, 2, 3, 4. **HW:** 680/3, 4, 5, 8, 9
	15.2 Displaying Data and Interpreting Data Displays (681)	𝔸𝕔𝕥𝕚𝕧𝕚𝕥𝕚𝕖𝕤 CA-314/1 to 6. **Practice** 690/1, 2, 3 **HW:** 692/4, 5, 8ab
11b	15.3 The Center of Data: Mean, Median, Mode (693)	𝔸𝕔𝕥𝕚𝕧𝕚𝕥𝕚𝕖𝕤 CA-321/1. CA-322/2, 3, 4. CA-323/2. CA-325/1, 2ab. 3. CA-333/1, 2 **Practice** 698/2, 3, 4, 5, 6. **HW:** 700/2, 4, 5, 7 to 10ab, 13, 14,abc, 17, 20*, 21*.
12a	16. Probability (722) 16.1 Basic Principles of Probability (723)	𝔸𝕔𝕥𝕚𝕧𝕚𝕥𝕚𝕖𝕤 **CA-341/3. CA-342/2, 3.** **Practice** 728/1, 2, 4 **HW:** 729/1, 2, 3, 4, 7
	16.2 Counting Number of Outcomes (730)	𝔸𝕔𝕥𝕚𝕧𝕚𝕥𝕚𝕖𝕤 **CA-346/1, 3, 4. CA-357/1, 2.** **Practice** 733/1, 2, 3, 4 **HW:** 735/2, 3ab, 5, 6abc
12b	16.3 Calculating Probabilities in Compound Events (736)	𝔸𝕔𝕥𝕚𝕧𝕚𝕥𝕚𝕖𝕤 **CA-351/16J:1, 2.** **Practice** 739/1abc, 2, 3 **HW:** 741/1 to 8, 10ab, 12, 13, 16ab
	16.4 Using Fraction Arithmetic to Calculate Probabilities (743)	𝔸𝕔𝕥𝕚𝕧𝕚𝕥𝕚𝕖𝕤 **CA-352/1. CA-354/1, 3c.** **Practice** 747/1, 2, 3* **HW:** 748/1, 2, 10, 11
13ab	**13a. Review; 13b. Test 3**	
14ab	**14a. Review; 14b. Review**	
15	**Final Exam**	